Fractional Series Introduction 1

As the first page of the original Series Introduction was a title page with no figure on it, I have decided to do, now, what I did not do, then. This will be a 9 figure series of simple single variable plates helping to learning how to manipulate a universal naming convention making it particular to particular circumstances and particular things while maintaining the given original linguistic concepts.

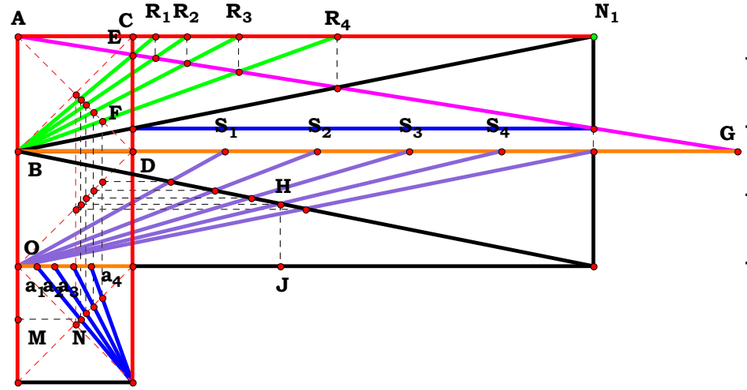
Each of these plates teaches one how, starting from a given unit, to count or enumerate using an extended naming convention defined by the figure itself.

In short, we learn how to enumerate, or count, we learn the basic operations, and then we learn to combine the two to fabricate enumerating systems for particular situations using the given Universal Linguistic Concepts.

Do not forget to read the concluding remarks at the end of the series.

figure 1.

$N_1 = 5.00000$
$R_1 = 1.19048$
$R_2 = 1.47059$
$R_3 = 1.92308$
$R_4 = 2.77778$
$S_1 = 1.80000$
$S_2 = 2.60000$
$S_3 = 3.40000$
$S_4 = 4.20000$
$a_1 = 0.16000$
$a_2 = 0.32000$
$a_3 = 0.48000$
$a_4 = 0.64000$



$\frac{N_1}{R_1} = 4.20000$ $\frac{N_1}{S_1} = 2.77778$ $\frac{N_1}{a_1} = 31.25000$

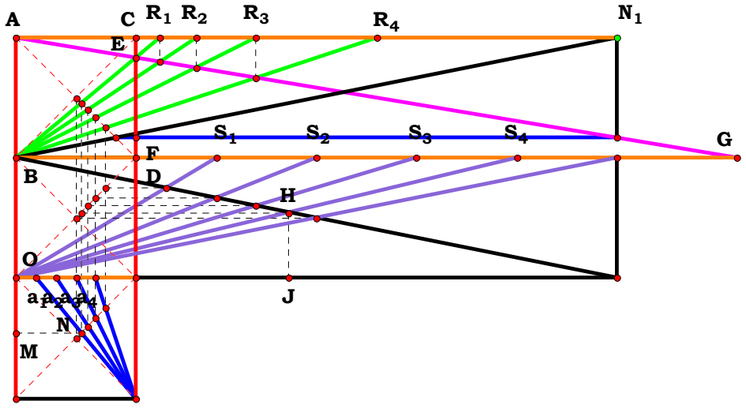
$\frac{N_1}{R_2} = 3.40000$ $\frac{N_1}{S_2} = 1.92308$ $\frac{N_1}{a_2} = 15.62500$

$\frac{N_1}{R_3} = 2.60000$ $\frac{N_1}{S_3} = 1.47059$ $\frac{N_1}{a_3} = 10.41667$

$\frac{N_1}{R_4} = 1.80000$ $\frac{N_1}{S_4} = 1.19048$ $\frac{N_1}{a_4} = 7.81250$

figure 4.

$N_1 = 5.00000$
$R_1 = 1.20000$
$R_2 = 1.50000$
$R_3 = 2.00000$
$R_4 = 3.00000$
$S_1 = 1.66667$
$S_2 = 2.50000$
$S_3 = 3.33333$
$S_4 = 4.16667$
$a_1 = 0.16667$
$a_2 = 0.33333$
$a_3 = 0.50000$
$a_4 = 0.66667$



$\frac{N_1}{R_1} = 4.16667$ $\frac{N_1}{S_1} = 3.00000$ $\frac{N_1}{a_1} = 30.00000$

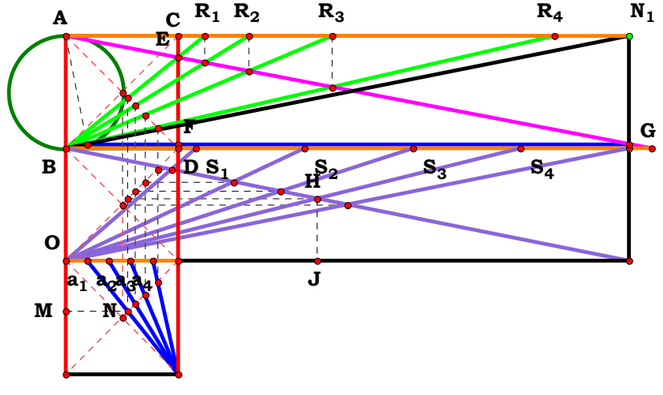
$\frac{N_1}{R_2} = 3.33333$ $\frac{N_1}{S_2} = 2.00000$ $\frac{N_1}{a_2} = 15.00000$

$\frac{N_1}{R_3} = 2.50000$ $\frac{N_1}{S_3} = 1.50000$ $\frac{N_1}{a_3} = 10.00000$

$\frac{N_1}{R_4} = 1.66667$ $\frac{N_1}{S_4} = 1.20000$ $\frac{N_1}{a_4} = 7.50000$

figure 7.

$N_1 = 5.00000$
$R_1 = 1.23810$
$R_2 = 1.62500$
$R_3 = 2.36364$
$R_4 = 4.33333$
$S_1 = 1.15385$
$S_2 = 2.11538$
$S_3 = 3.07692$
$S_4 = 4.03846$
$a_1 = 0.19231$
$a_2 = 0.38462$
$a_3 = 0.57692$
$a_4 = 0.76923$



$\frac{N_1}{R_1} = 4.03846$ $\frac{N_1}{S_1} = 4.33333$ $\frac{N_1}{a_1} = 26.00000$

$\frac{N_1}{R_2} = 3.07692$ $\frac{N_1}{S_2} = 2.36364$ $\frac{N_1}{a_2} = 13.00000$

$\frac{N_1}{R_3} = 2.11538$ $\frac{N_1}{S_3} = 1.62500$ $\frac{N_1}{a_3} = 8.66667$

$\frac{N_1}{R_4} = 1.15385$ $\frac{N_1}{S_2} = 2.36364$ $\frac{N_1}{a_4} = 6.50000$

$AB := 1$

$N_1 := 5$

Figure 1, 2 and 3.

Figure 1.

$$DF := \frac{1}{N_1} \qquad BG := \frac{N_1}{1 - DF} \qquad CE := \frac{1}{BG}$$

$$R_1 := \frac{1}{1 - CE} \qquad R_1 - \frac{{N_1}^2}{{N_1}^2 - (N_1 - 1)} = 0$$

$$\frac{{N_1}^2}{{N_1}^2 - Index \cdot (N_1 - 1)}$$

$$\frac{{N_1}^2}{{N_1}^2 - 2 \cdot (N_1 - 1)} = 1.470588$$

$$\frac{{N_1}^2}{{N_1}^2 - 3 \cdot (N_1 - 1)} = 1.923077$$

$$\frac{{N_1}^2}{{N_1}^2 - 4 \cdot (N_1 - 1)} = 2.777778$$

$N_1 = 5.00000$
$R_1 = 1.19048$
$R_2 = 1.47059$
$R_3 = 1.92308$
$R_4 = 2.77778$

$S_1 = 1.80000$
$S_2 = 2.60000$
$S_3 = 3.40000$
$S_4 = 4.20000$

$a_1 = 0.16000$
$a_2 = 0.32000$
$a_3 = 0.48000$
$a_4 = 0.64000$

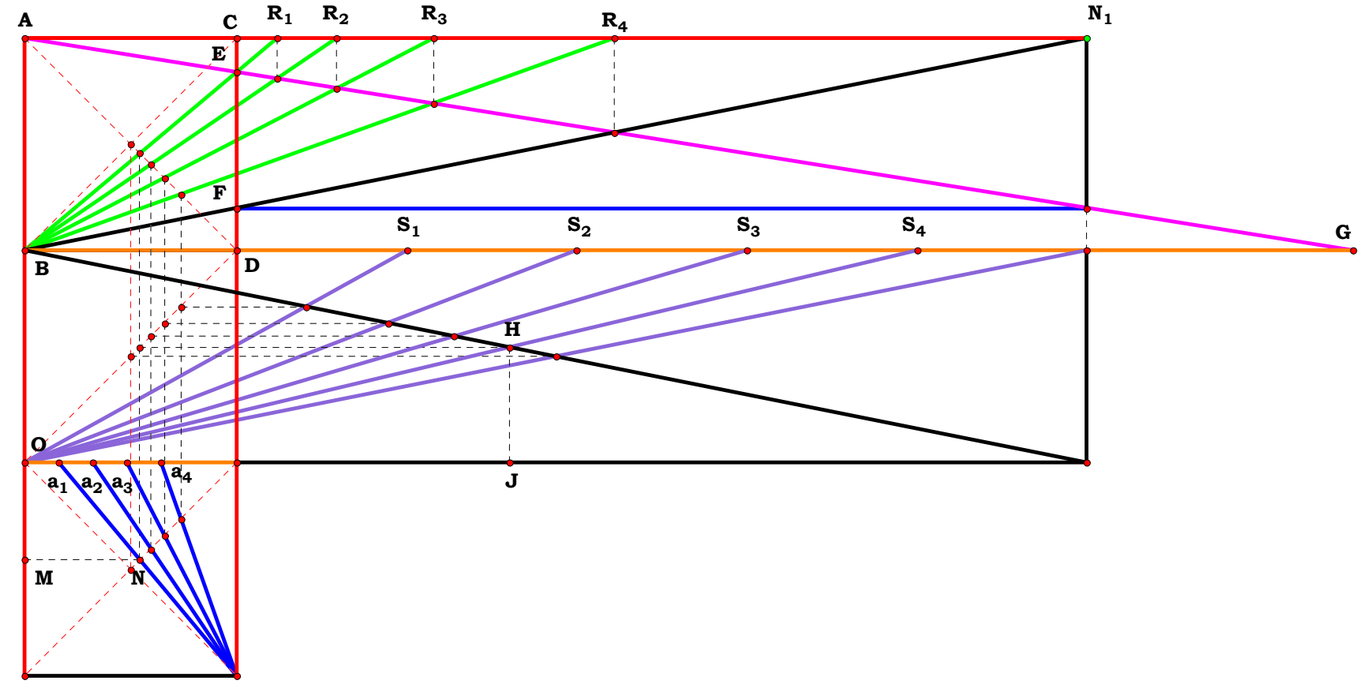


Figure 2.

$$HJ := \frac{1}{R_1 + 1} \qquad JO := N_1 \cdot HJ \qquad S_4 := \frac{JO}{1 - HJ} \qquad S_4 - \frac{N_1}{R_1} = 0 \qquad S_4 = 4.2$$

$$\frac{{N_1}^2 - Index \cdot (N_1 - 1)}{N_1}$$

$$\frac{{N_1}^2 - 1 \cdot (N_1 - 1)}{N_1} = 4.2$$

$$\frac{{N_1}^2 - 2 \cdot (N_1 - 1)}{N_1} = 3.4$$

$$\frac{{N_1}^2 - 3 \cdot (N_1 - 1)}{N_1} = 2.6$$

$$\frac{{N_1}^2 - 4 \cdot (N_1 - 1)}{N_1} = 1.8$$

Interval between consecutive S sub x's.

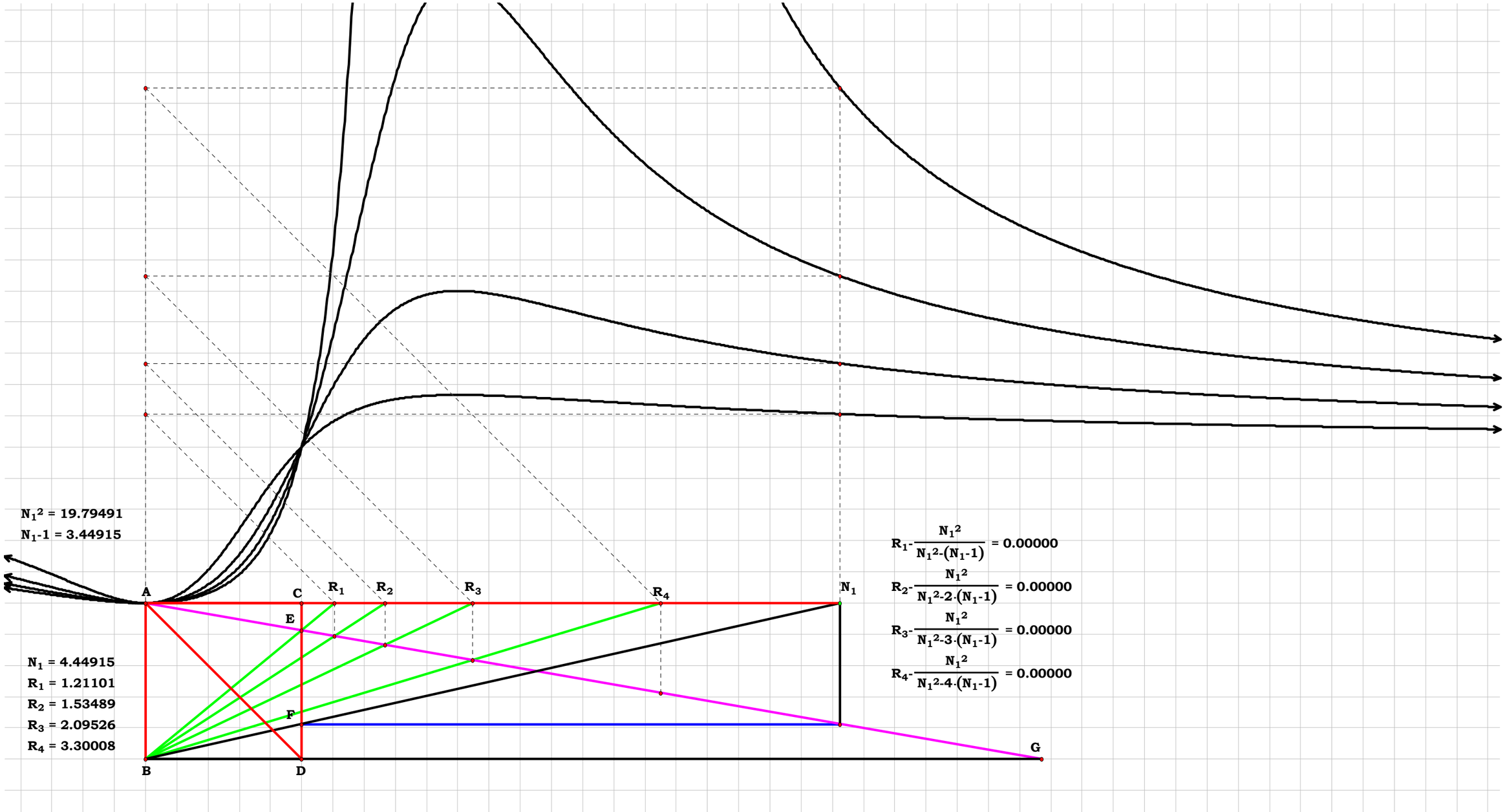
$$\frac{N_1 - 1}{N_1} = 0.8 \qquad S_4 + \frac{N_1 - 1}{N_1} - N_1 = 0$$

Figure 3.

$$MN := R_1 \cdot HJ \qquad a_1 := 1 - \frac{1 - MN}{MN} \qquad \frac{Index \cdot (N_1 - 1)}{{N_1}^2} \qquad a_1 = 0.16$$

$$\frac{2 \cdot (N_1 - 1)}{{N_1}^2} = 0.32 \qquad \frac{3 \cdot (N_1 - 1)}{{N_1}^2} = 0.48 \qquad \frac{1}{a_1} = 6.25$$

$$\frac{3 \cdot (N_1 - 1)}{{N_1}^2} = 0.48 \qquad \frac{4 \cdot (N_1 - 1)}{{N_1}^2} = 0.64$$


N_1^2 = 19.79491
N_1-1 = 3.44915
N_1 = 4.44915
R_1 = 1.21101
R_2 = 1.53489
R_3 = 2.09526
R_4 = 3.30008
A
B
C
D
E
F
G
R_1
R_2
R_3
R_4
N_1
$R_1-\frac{N_1^2}{N_1^2-(N_1-1)}$ = 0.00000
$R_2-\frac{N_1^2}{N_1^2-2\cdot(N_1-1)}$ = 0.00000
$R_3-\frac{N_1^2}{N_1^2-3\cdot(N_1-1)}$ = 0.00000
$R_4-\frac{N_1^2}{N_1^2-4\cdot(N_1-1)}$ = 0.00000

$AB := 1$

$N_1 := 5$

Figure 4, 5 and 6.

Figure 4.

$$DF := \frac{1}{N_1 + 1} \qquad BG := \frac{N_1}{1 - DF} \qquad CE := \frac{1}{BG}$$

$$R_1 := \frac{1}{1 - CE} \qquad R_1 - \frac{N_1 + 1}{N_1} = 0$$

$$\frac{N_1 + 1}{N_1 + 1 - Index}$$

$$\frac{N_1 + 1}{N_1 + 1 - 2} = 1.5$$

$$\frac{N_1 + 1}{N_1 + 1 - 3} = 2$$

$$\frac{N_1 + 1}{N_1 + 1 - 4} = 3$$

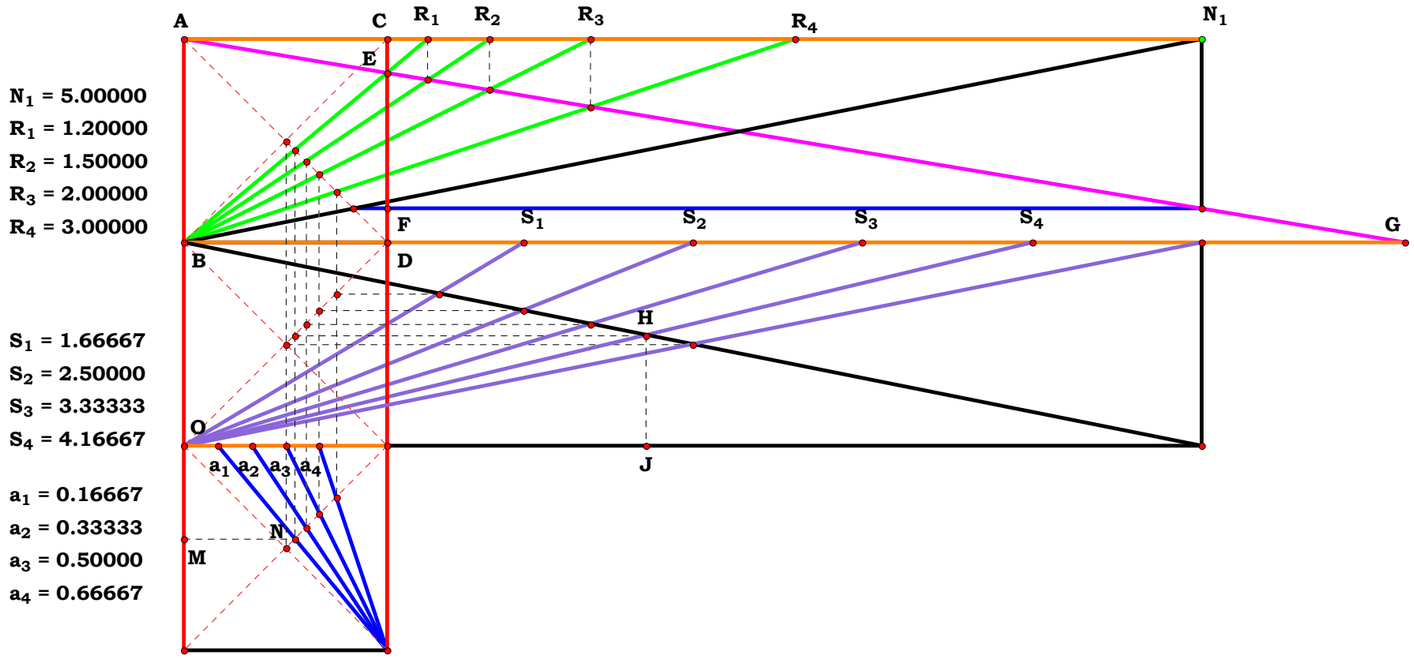


Figure 5.

$$HJ := \frac{1}{R_1 + 1} \qquad JO := N_1 \cdot HJ \qquad S_4 := \frac{JO}{1 - HJ} \qquad S_4 - \frac{N_1}{R_1} = 0 \qquad S_4 = 4.166667$$

$$\frac{N_1 \cdot (N_1 - Index)}{N_1 + 1}$$

$$\frac{N_1 \cdot (N_1 - 0)}{N_1 + 1} = 4.166667$$

$$\frac{N_1 \cdot (N_1 - 1)}{N_1 + 1} = 3.333333$$

$$\frac{N_1 \cdot (N_1 - 2)}{N_1 + 1} = 2.5$$

$$\frac{N_1 \cdot (N_1 - 3)}{N_1 + 1} = 1.666667$$

Interval between consecutive S sub x's.

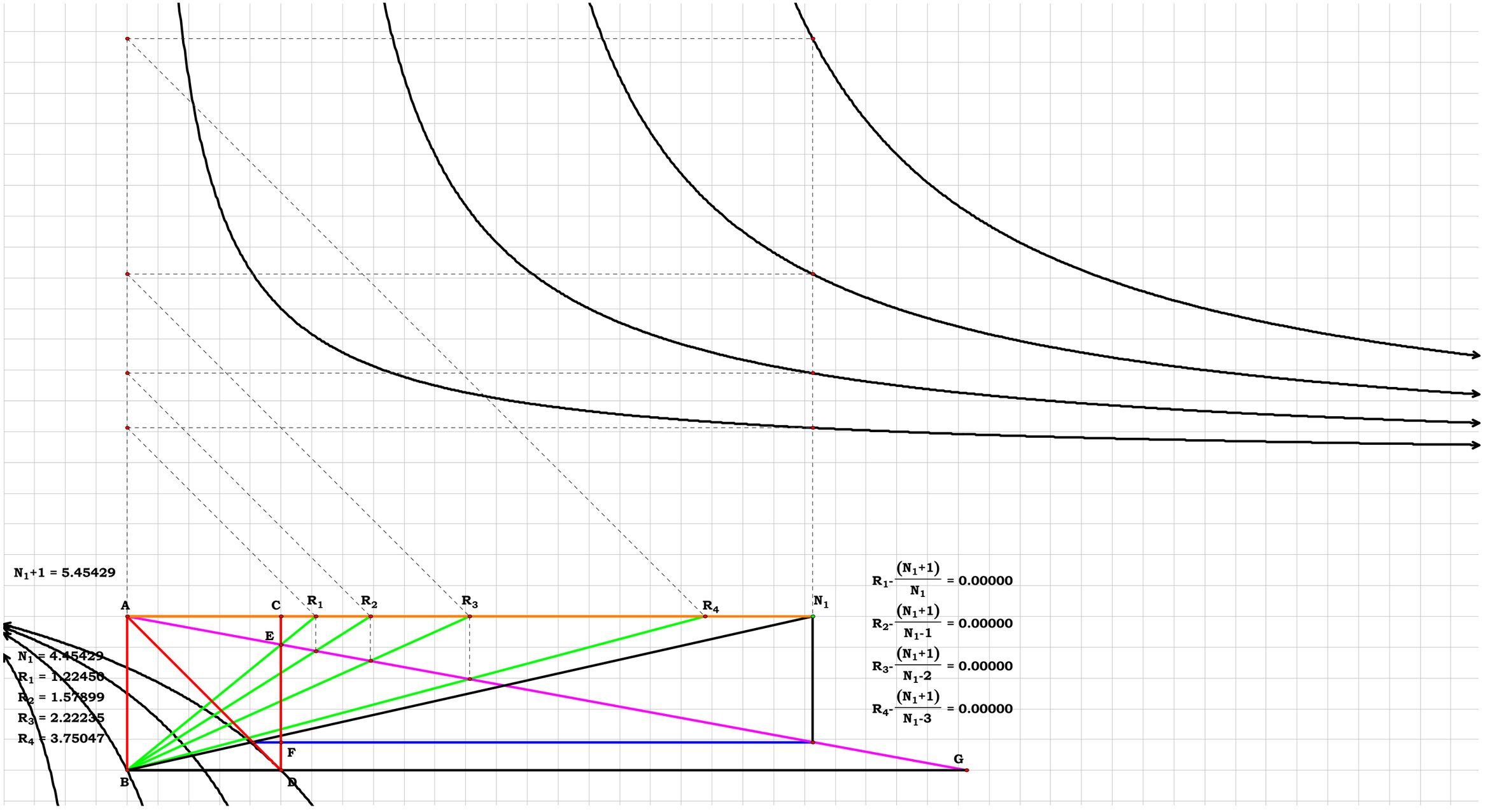
$$\frac{N_1}{N_1 + 1} = 0.833333 \qquad S_4 + \frac{N_1}{N_1 + 1} - N_1 = 0$$

Figure 6.

$$MN := R_1 \cdot HJ \qquad a_1 := 1 - \frac{1 - MN}{MN} \qquad \frac{Index}{N_1 + 1} \qquad a_1 = 0.166667$$

$$\frac{1}{N_1 + 1} = 0.166667 \qquad \frac{3}{N_1 + 1} = 0.5 \qquad \frac{1}{a_1} = 6$$

$$\frac{2}{N_1 + 1} = 0.333333 \qquad \frac{4}{N_1 + 1} = 0.666667$$


N1+1 = 5.45429
A
C
R1
R2
R3
R4
N1
E
F
G
B
D
N1 = 4.45429
R1 = 1.22458
R2 = 1.57899
R3 = 2.22235
R4 = 3.75047
R1-(N1+1)/N1 = 0.00000
R2-(N1+1)/N1-1 = 0.00000
R3-(N1+1)/N1-2 = 0.00000
R4-(N1+1)/N1-3 = 0.00000

$AB := 1$

$N_1 := 5$

Figure 7, 8 and 9.

Figure 7

$$DF := \frac{1}{N_1^2 + 1} \qquad BG := \frac{N_1}{1 - DF} \qquad CE := \frac{1}{BG}$$

$$R_1 := \frac{1}{1 - CE} \qquad R_1 - \frac{N_1^2 + 1}{N_1^2 - N_1 + 1} = 0$$

$$\frac{N_1^2 + 1}{N_1^2 + 1 - Index \cdot N_1}$$

$$\frac{N_1^2 + 1}{N_1^2 + 1 - 2 \cdot N_1} = 1.625$$

$$\frac{N_1^2 + 1}{N_1^2 + 1 - 3 \cdot N_1} = 2.363636$$

$$\frac{N_1^2 + 1}{N_1^2 + 1 - 4 \cdot N_1} = 4.333333$$

$N_1 = 5.00000$
$R_1 = 1.23810$
$R_2 = 1.62500$
$R_3 = 2.36364$
$R_4 = 4.33333$

$S_1 = 1.15385$
$S_2 = 2.11538$
$S_3 = 3.07692$
$S_4 = 4.03846$

$a_1 = 0.19231$
$a_2 = 0.38462$
$a_3 = 0.57692$
$a_4 = 0.76923$

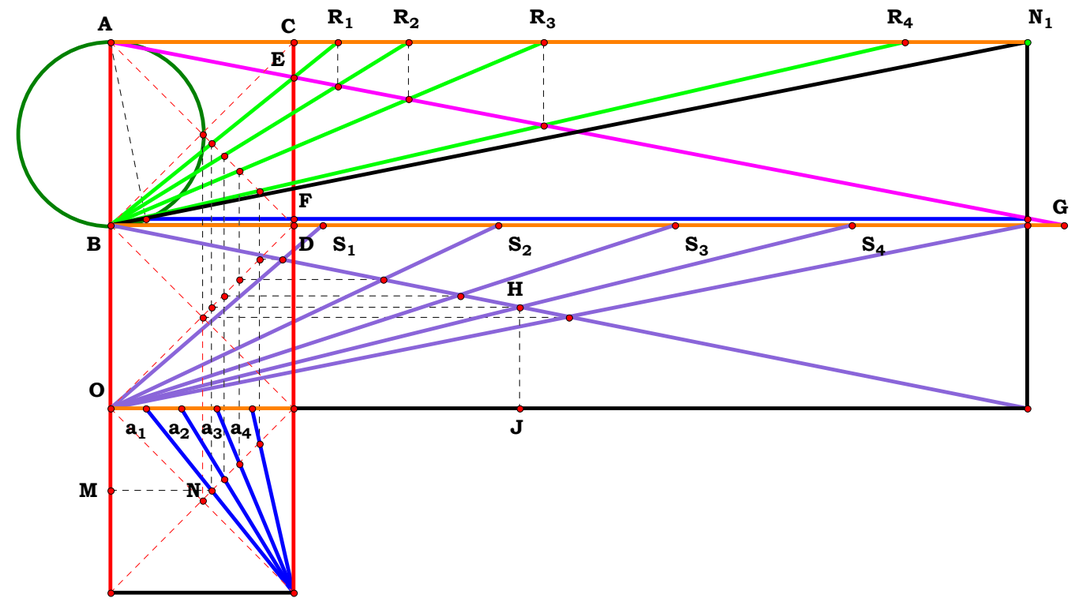


Figure 8.

$$HJ := \frac{1}{R_1 + 1} \qquad JO := N_1 \cdot HJ \qquad S_4 := \frac{JO}{1 - HJ} \qquad S_4 - \frac{N_1}{R_1} = 0 \qquad S_4 = 4.038462$$

$$\frac{N_1^3 + N_1 - Index \cdot N_1^2}{N_1^2 + 1}$$

$$\frac{N_1^3 + N_1 - 1 \cdot N_1^2}{N_1^2 + 1} = 4.038462$$

$$\frac{N_1^3 + N_1 - 2 \cdot N_1^2}{N_1^2 + 1} = 3.076923$$

$$\frac{N_1^3 + N_1 - 3 \cdot N_1^2}{N_1^2 + 1} = 2.115385$$

$$\frac{N_1^3 + N_1 - 4 \cdot N_1^2}{N_1^2 + 1} = 1.153846$$

Interval between consecutive S sub x's.

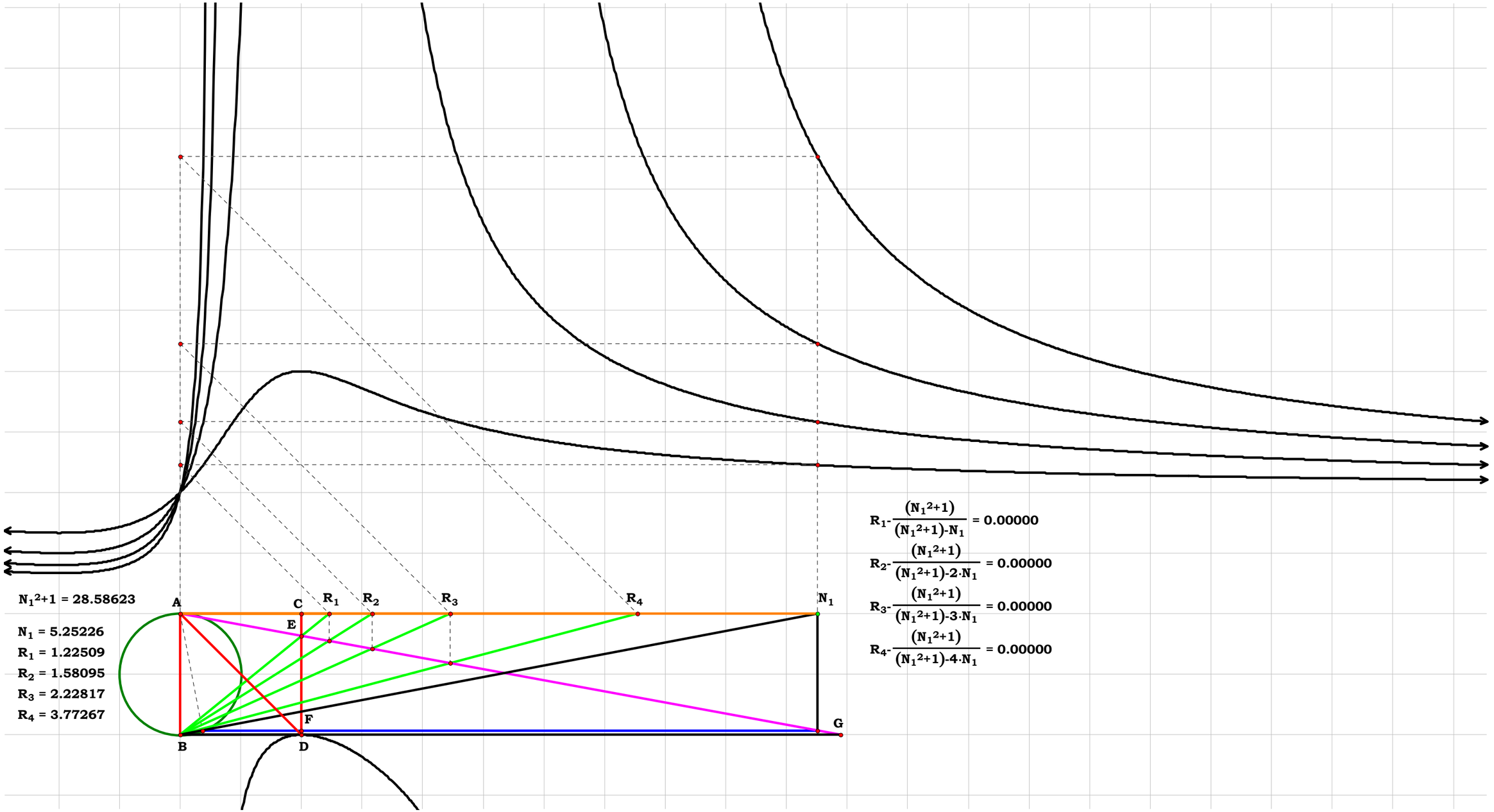
$$\frac{N_1^2}{N_1^2 + 1} = 0.961538 \qquad S_4 + \frac{N_1^2}{N_1^2 + 1} - N_1 = 0$$

Figure 9.

$$MN := R_1 \cdot HJ \qquad a_1 := 1 - \frac{1 - MN}{MN} \qquad \frac{Index \cdot N_1}{N_1^2 + 1} \qquad a_1 = 0.192308$$

$$\frac{1 \cdot N_1}{N_1^2 + 1} = 0.192308 \qquad \frac{3 \cdot N_1}{N_1^2 + 1} = 0.576923 \qquad \frac{1}{a_1} = 5.2$$

$$\frac{2 \cdot N_1}{N_1^2 + 1} = 0.384615 \qquad \frac{4 \cdot N_1}{N_1^2 + 1} = 0.769231$$



$N_1^2+1 = 28.58623$

$N_1 = 5.25226$

$R_1 = 1.22509$

$R_2 = 1.58095$

$R_3 = 2.22817$

$R_4 = 3.77267$

$$R_1\text{-}\frac{(N_1^2+1)}{(N_1^2+1)-N_1} = 0.00000$$

$$R_2\text{-}\frac{(N_1^2+1)}{(N_1^2+1)-2\cdot N_1} = 0.00000$$

$$R_3\text{-}\frac{(N_1^2+1)}{(N_1^2+1)-3\cdot N_1} = 0.00000$$

$$R_4\text{-}\frac{(N_1^2+1)}{(N_1^2+1)-4\cdot N_1} = 0.00000$$

Conclusion of the 9 plate series.

It goes without saying that I never demonstrate all of the possible constructions in most of my work. That is not the job of presenting a Tour de Force in Philosophy. A Tour de Force presents a method of complete induction, not a complete set of individual results, which is factually impossible. The argument that a Tour de Force is impossible because someone did not mention some particular item is fallacious; it is like saying that someone did not teach mathematics because they never mentioned some particular number. That argument works only on someone who is not overly bright, everyone starts thinking using enumeration, one either evolves to thinking in terms of definition, or they do not. When they do not, they are condemned to a life of contradiction. How would you discern the difference between heaven and hell?

A grammar book, founded upon the unit concept of a thing, is itself an example of a Tour de Force in Philosophy. Factually, there is only one Tour de Force in Philosophy possible, and it was mentioned a very long time ago.

What does the parable of, If thy eye be single, your whole body would be full of light mean? Does it not mean, that there is but one and only one standard that psychology is based on? That is a biological fact.

$\frac{N_1}{b_1} = 5.20000$

$\frac{N_1}{b_2} = 4.40000$

$\frac{N_1}{b_3} = 3.60000$

$\frac{N_1}{b_4} = 2.80000$

$\frac{N_1}{R_1} = 4.20000$

$\frac{N_1}{R_2} = 3.40000$

$\frac{N_1}{R_3} = 2.60000$

$\frac{N_1}{R_4} = 1.80000$

$\frac{N_1}{S_1} = 2.77778$

$\frac{N_1}{S_2} = 1.92308$

$\frac{N_1}{S_3} = 1.47059$

$\frac{N_1}{S_4} = 1.19048$

$\frac{N_1}{a_1} = 31.25000$

$\frac{N_1}{a_2} = 15.62500$

$\frac{N_1}{a_3} = 10.41667$

$\frac{N_1}{a_4} = 7.81250$

$b_1 = 0.96154$

$b_2 = 1.13636$

$b_3 = 1.38889$

$b_4 = 1.78571$

$N_1 = 5.00000$

$R_1 = 1.19048$

$R_2 = 1.47059$

$R_3 = 1.92308$

$R_4 = 2.77778$

$S_1 = 1.80000$

$S_2 = 2.60000$

$S_3 = 3.40000$

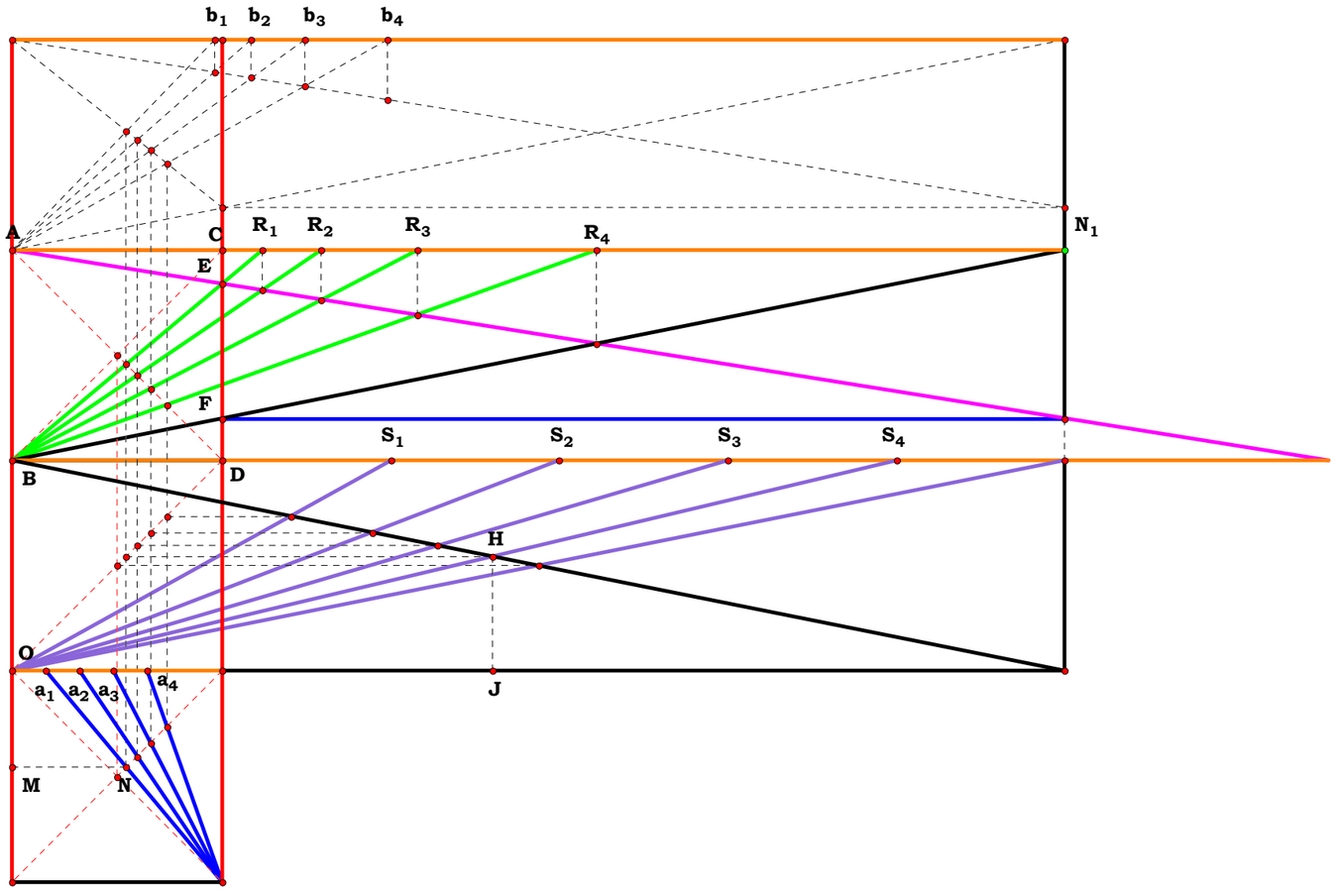
$S_4 = 4.20000$

$a_1 = 0.16000$

$a_2 = 0.32000$

$a_3 = 0.48000$

$a_4 = 0.64000$



Fractional Series Book 1 1

$AB := 1$

$N_1 := 2.87497$

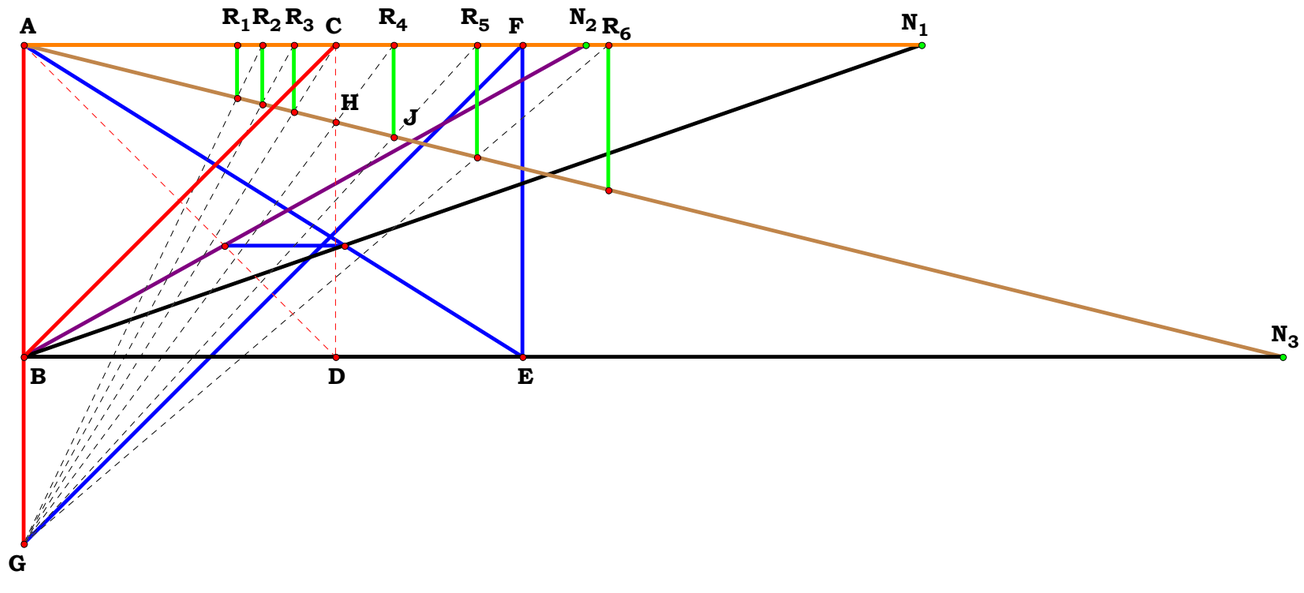
$N_2 := 1.79901$

$N_3 := 4.03249$

$N_1 = 2.87497$
$N_2 = 1.79901$
$N_3 = 4.03249$
$R_1 = 0.68235$
$R_2 = 0.76315$
$R_3 = 0.86567$
$R_4 = 1.18368$
$R_5 = 1.45002$
$R_6 = 1.87102$

$$AF := \frac{N_1}{N_2} \qquad CH := \frac{1}{N_3} \qquad AG := AF$$

$$R_4 := \frac{AG}{AG - CH} \qquad JR_4 := \frac{R_4}{N_3} \qquad R_5 := \frac{AG \cdot R_4}{AG - JR_4}$$



One can walk each value down, however, these three iterations produce:

$$AB - \frac{N_1 \cdot N_3}{N_1 \cdot N_3} = 0 \qquad R_4 - \frac{N_1 \cdot N_3}{N_1 \cdot N_3 - N_2} = 0 \qquad R_5 - \frac{N_1 \cdot N_3}{N_1 \cdot N_3 - 2 \cdot N_2} = 0$$

giving a sequence:

$$\frac{N_1 \cdot N_3}{N_1 \cdot N_3 - N_2 \cdot Index} \qquad R_1 := \frac{N_1 \cdot N_3}{N_1 \cdot N_3 - N_2 \cdot -3}$$

$$R_2 := \frac{N_1 \cdot N_3}{N_1 \cdot N_3 - N_2 \cdot -2} \qquad R_3 := \frac{N_1 \cdot N_3}{N_1 \cdot N_3 - N_2 \cdot -1}$$

$$AB - \frac{N_1 \cdot N_3}{N_1 \cdot N_3} = 0 \qquad R_4 - \frac{N_1 \cdot N_3}{N_1 \cdot N_3 - N_2} = 0$$

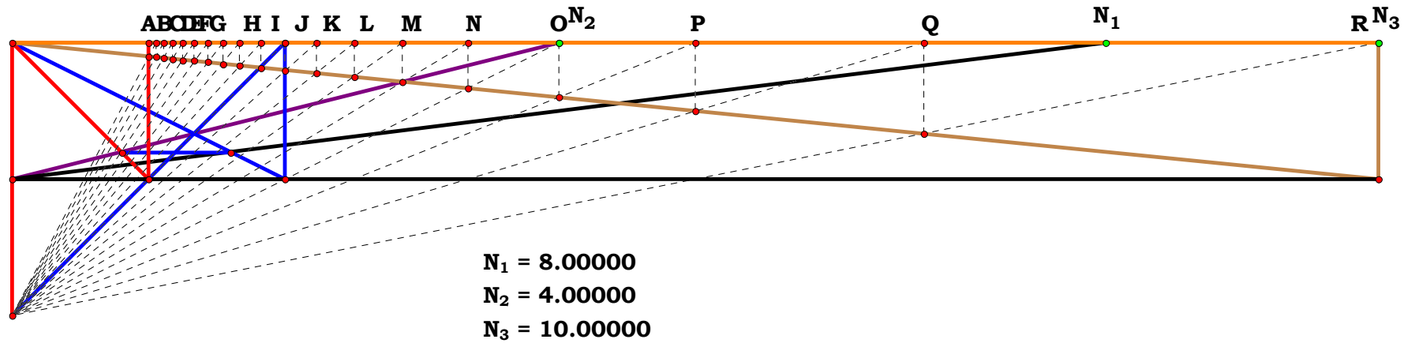
$$R_5 - \frac{N_1 \cdot N_3}{N_1 \cdot N_3 - N_2 \cdot 2} = 0 \qquad R_6 := \frac{N_1 \cdot N_3}{N_1 \cdot N_3 - N_2 \cdot 3}$$

$R_1 = 0.682347$ $R_4 = 1.18368$

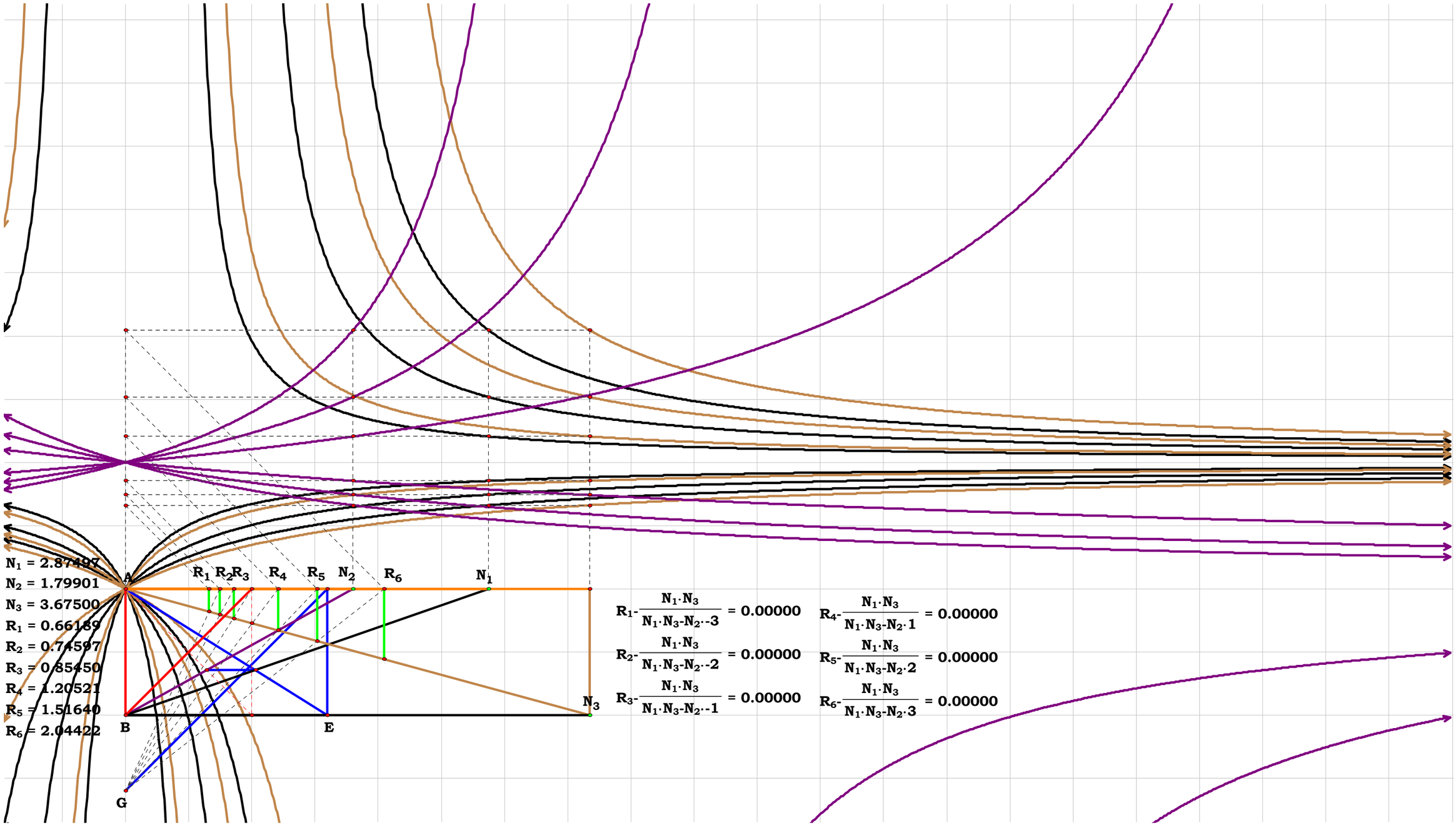
$R_2 = 0.763153$ $R_4 = 1.18368$

$R_3 = 0.865668$ $R_6 = 1.871014$

A = 1.05263
B = 1.11111
C = 1.17647
D = 1.25000
E = 1.33333
F = 1.42857
G = 1.53846
H = 1.66667
I = 1.81818
J = 2.00000
K = 2.22222
L = 2.50000
M = 2.85714
N = 3.33333
O = 4.00000
P = 5.00000
Q = 6.66667
R = 10.00000



$N_1 = 8.00000$
$N_2 = 4.00000$
$N_3 = 10.00000$


N1 = 2.87497
N2 = 1.79901
N3 = 3.67500
R1 = 0.66189
R2 = 0.74597
R3 = 0.85450
R4 = 1.20521
R5 = 1.51640
R6 = 2.04422
A
B
E
G
R1 R2 R3 R4 R5 N2 R6 N1
N3
R1- N1·N3 / N1·N3-N2·-3 = 0.00000
R2- N1·N3 / N1·N3-N2·-2 = 0.00000
R3- N1·N3 / N1·N3-N2·-1 = 0.00000
R4- N1·N3 / N1·N3-N2·1 = 0.00000
R5- N1·N3 / N1·N3-N2·2 = 0.00000
R6- N1·N3 / N1·N3-N2·3 = 0.00000

$AB := 1$

$N_1 := 1.73988$

$N_2 := 2.18406$

$N_3 := 3.49697$

Fractional Series Book 1 3

$DE := \frac{1}{N_3}$ $BK := \frac{N_2}{1 - DE}$ $CF := \frac{1}{BK}$

$R_4 := \frac{N_1}{N_1 - CF}$ $GR_4 := \frac{R_4 \cdot (N_3 - 1)}{N_2 \cdot N_3}$ $R_5 := \frac{N_1 \cdot R_4}{N_1 - GR_4}$

$CF - \frac{N_3 - 1}{N_2 \cdot N_3} = 0$

By interpolation gives:

$$\frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - Index \cdot (N_3 - 1)}$$

$$R_4 - \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - N_3 + 1} = 0$$

$$R_5 - \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - 2 \cdot N_3 + 2} = 0$$

$$R_1 := \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - (N_3 - 1) \cdot -3}$$

$$R_2 := \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - (N_3 - 1) \cdot -2}$$

$$R_3 := \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - (N_3 - 1) \cdot -1}$$

$$AB - \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - (N_3 - 1) \cdot 0} = 0$$

$$R_4 - \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - (N_3 - 1) \cdot 1} = 0$$

$$R_5 - \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - (N_3 - 1) \cdot 2} = 0$$

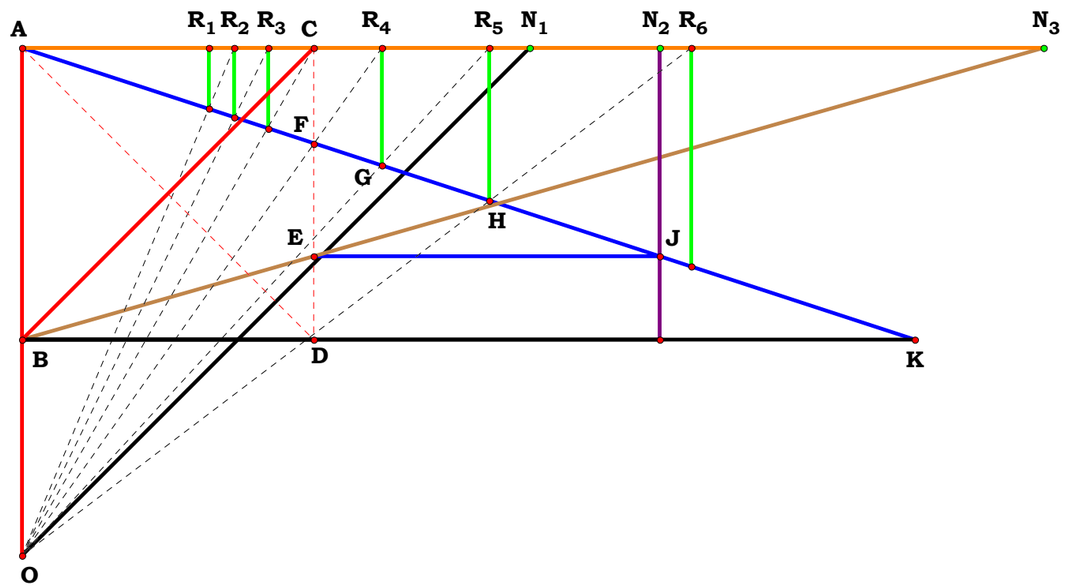
$$R_6 := \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - (N_3 - 1) \cdot 3}$$

$R_1 = 0.639503$ $R_4 = 1.231383$

$R_2 = 0.726845$ $R_5 = 1.602075$

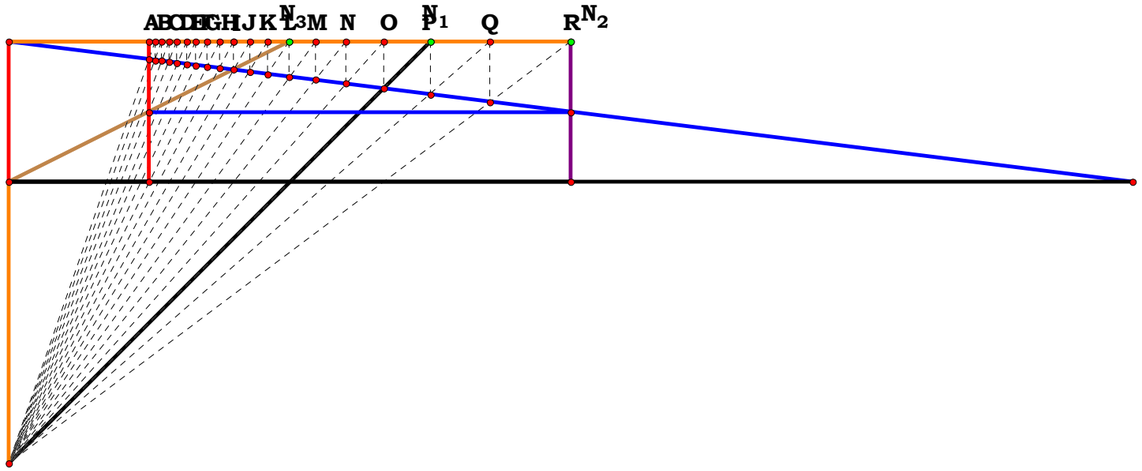
$R_3 = 0.841818$ $R_6 = 2.292074$

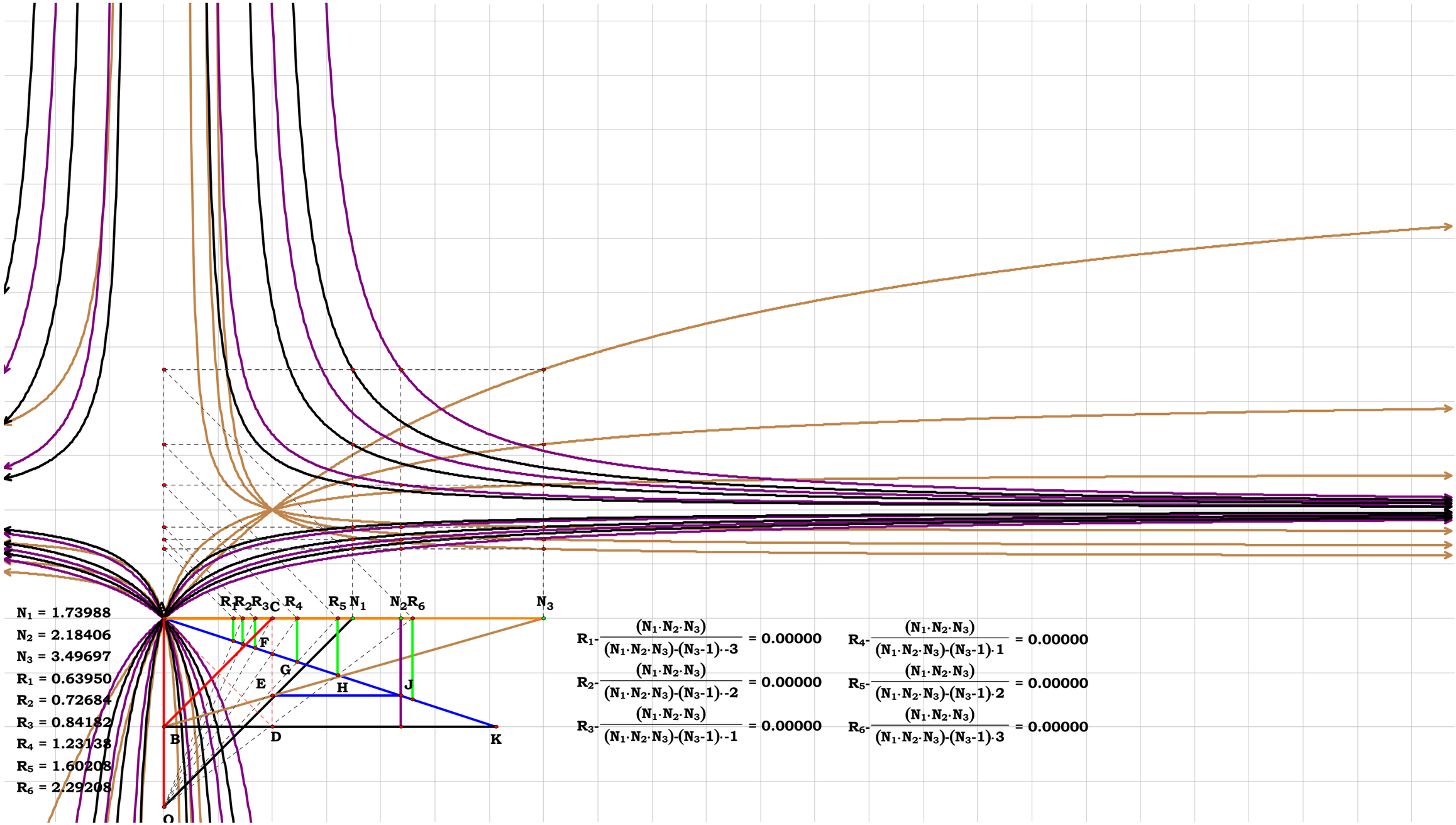
$N_1 = 1.73988$
$N_2 = 2.18406$
$N_3 = 3.49697$
$R_1 = 0.63950$
$R_2 = 0.72684$
$R_3 = 0.84182$
$R_4 = 1.23138$
$R_5 = 1.60208$
$R_6 = 2.29208$



A = 1.04348
B = 1.09091
C = 1.14286
D = 1.20000
E = 1.26316
F = 1.33333
G = 1.41176
H = 1.50000
I = 1.60000
J = 1.71429
K = 1.84615
L = 2.00000
M = 2.18182
N = 2.40000
O = 2.66667
P = 3.00000
Q = 3.42857
R = 4.00000

$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 2.00000$





$N_1 = 1.73988$

$N_2 = 2.18406$

$N_3 = 3.49697$

$R_1 = 0.63950$

$R_2 = 0.72684$

$R_3 = 0.84182$

$R_4 = 1.23138$

$R_5 = 1.60208$

$R_6 = 2.29208$

$$R_1\text{-}\frac{(N_1\cdot N_2\cdot N_3)}{(N_1\cdot N_2\cdot N_3)-(N_3-1)\cdot -3} = 0.00000 \qquad R_4\text{-}\frac{(N_1\cdot N_2\cdot N_3)}{(N_1\cdot N_2\cdot N_3)-(N_3-1)\cdot 1} = 0.00000$$

$$R_2\text{-}\frac{(N_1\cdot N_2\cdot N_3)}{(N_1\cdot N_2\cdot N_3)-(N_3-1)\cdot -2} = 0.00000 \qquad R_5\text{-}\frac{(N_1\cdot N_2\cdot N_3)}{(N_1\cdot N_2\cdot N_3)-(N_3-1)\cdot 2} = 0.00000$$

$$R_3\text{-}\frac{(N_1\cdot N_2\cdot N_3)}{(N_1\cdot N_2\cdot N_3)-(N_3-1)\cdot -1} = 0.00000 \qquad R_6\text{-}\frac{(N_1\cdot N_2\cdot N_3)}{(N_1\cdot N_2\cdot N_3)-(N_3-1)\cdot 3} = 0.00000$$

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$AB := 1$

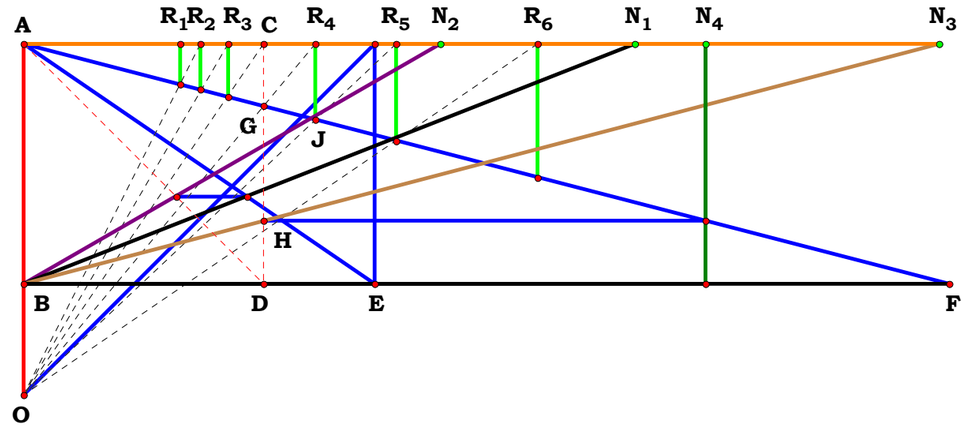
$N_1 := 2.54173$

$N_2 := 1.73712$

$N_3 := 3.81280$

$N_4 := 2.84066$

$N_1 = 2.54173$
$N_2 = 1.73712$
$N_3 = 3.81280$
$N_4 = 2.84066$
$R_1 = 0.65254$
$R_2 = 0.73802$
$R_5 = 0.84926$
$R_4 = 1.21579$
$R_5 = 1.55035$
$R_6 = 2.13892$



$BE := \frac{N_1}{N_2}$ $DH := \frac{1}{N_3}$ $BF := \frac{N_4}{1 - DH}$ $CG := \frac{1}{BF}$

$R_4 := \frac{BE}{BE - CG}$ $R_5 := \frac{BE}{BE - CG \cdot 2}$ $R_6 := \frac{BE}{BE - CG \cdot 3}$

$R_3 := \frac{BE}{BE - CG \cdot -1}$ $R_2 := \frac{BE}{BE - CG \cdot -2}$ $R_1 := \frac{BE}{BE - CG \cdot -3}$ $CG - \frac{N_3 - 1}{N_3 \cdot N_4} = 0$ $\frac{N_1 \cdot N_3 \cdot N_4}{Index \cdot (N_2 - N_2 \cdot N_3) + N_1 \cdot N_3 \cdot N_4}$

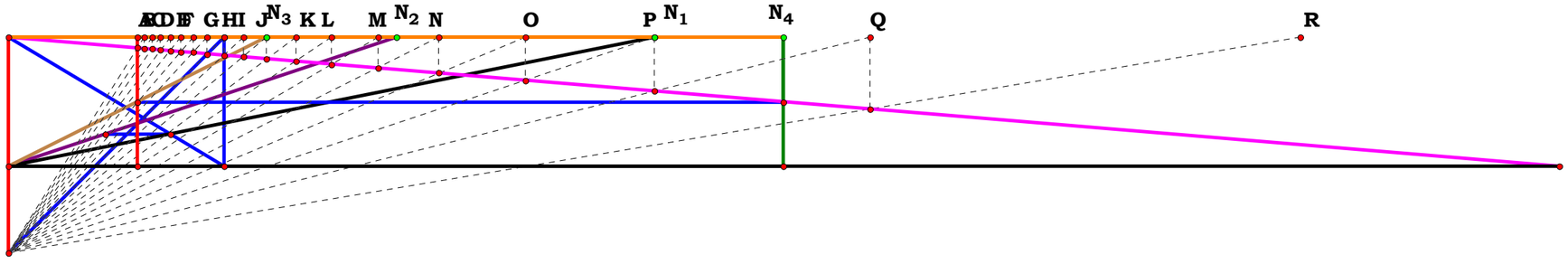
$R_4 - \frac{N_1 \cdot N_3 \cdot N_4}{N_2 - N_2 \cdot N_3 + N_1 \cdot N_3 \cdot N_4} = 0$ $R_5 - \frac{N_1 \cdot N_3 \cdot N_4}{2 \cdot (N_2 - N_2 \cdot N_3) + N_1 \cdot N_3 \cdot N_4} = 0$ $R_1 - \frac{N_1 \cdot N_3 \cdot N_4}{-3 \cdot (N_2 - N_2 \cdot N_3) + N_1 \cdot N_3 \cdot N_4} = 0$ $R_2 - \frac{N_1 \cdot N_3 \cdot N_4}{-2 \cdot (N_2 - N_2 \cdot N_3) + N_1 \cdot N_3 \cdot N_4} = 0$

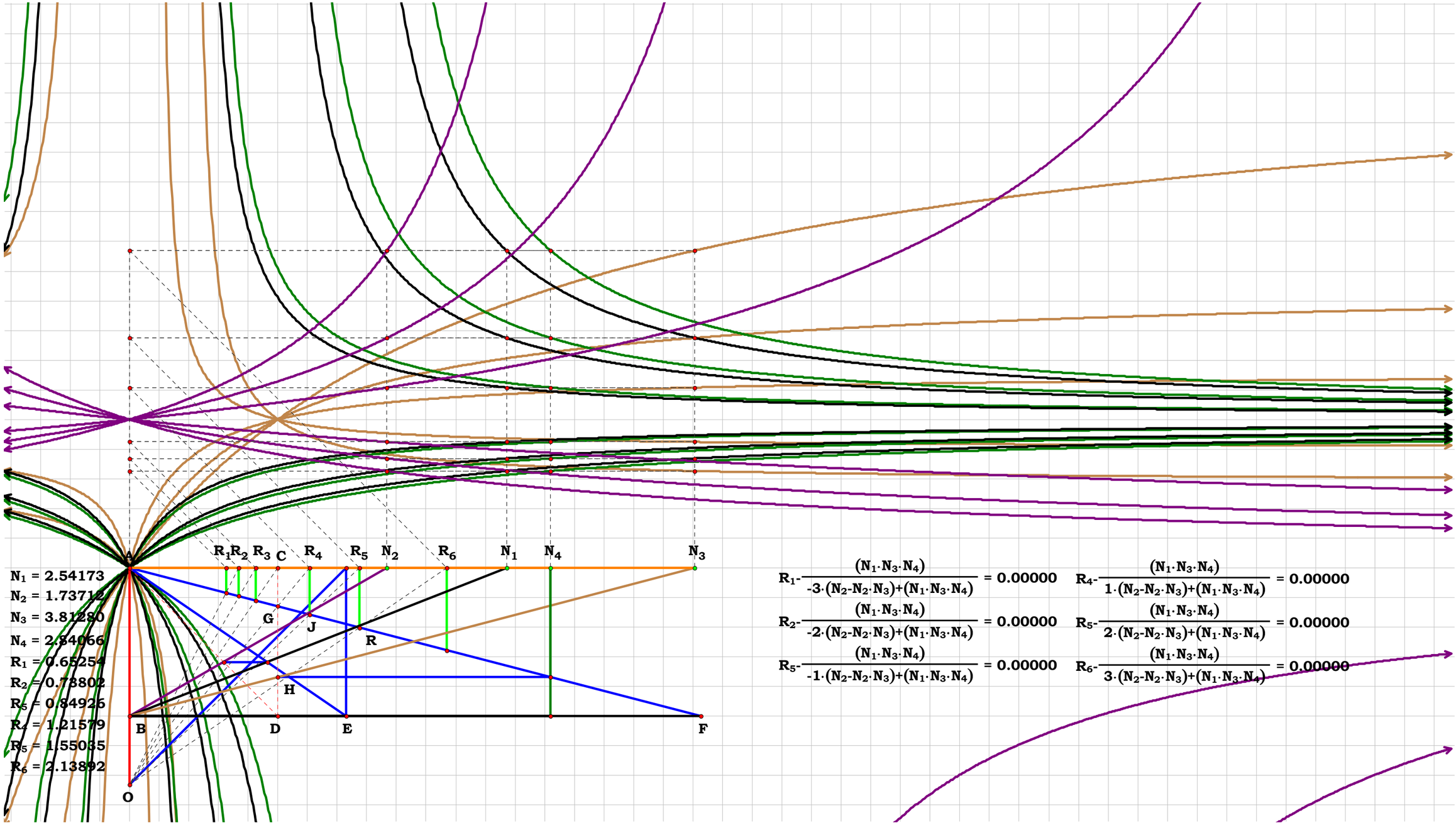
$R_3 - \frac{N_1 \cdot N_3 \cdot N_4}{-1 \cdot (N_2 - N_2 \cdot N_3) + N_1 \cdot N_3 \cdot N_4} = 0$ $R_4 - \frac{N_1 \cdot N_3 \cdot N_4}{1 \cdot (N_2 - N_2 \cdot N_3) + N_1 \cdot N_3 \cdot N_4} = 0$ $R_5 - \frac{N_1 \cdot N_3 \cdot N_4}{2 \cdot (N_2 - N_2 \cdot N_3) + N_1 \cdot N_3 \cdot N_4} = 0$ $R_6 - \frac{N_1 \cdot N_3 \cdot N_4}{3 \cdot (N_2 - N_2 \cdot N_3) + N_1 \cdot N_3 \cdot N_4} = 0$

$N_1 = 5.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 6.00000$

$A = 1.05263$ $G = 1.53846$ $M = 2.85714$
$B = 1.11111$ $H = 1.66667$ $N = 3.33333$
$C = 1.17647$ $I = 1.81818$ $O = 4.00000$
$D = 1.25000$ $J = 2.00000$ $P = 5.00000$
$E = 1.33333$ $K = 2.22222$ $Q = 6.66667$
$F = 1.42857$ $L = 2.50000$ $R = 10.00000$

$R_1 = 0.65254$
$R_2 = 0.738017$
$R_3 = 0.849263$
$R_4 = 1.215792$
$R_5 = 1.550344$
$R_6 = 2.138912$





$N_1 = 2.54173$
$N_2 = 1.73712$
$N_3 = 3.81280$
$N_4 = 2.84066$
$R_1 = 0.65254$
$R_2 = 0.78802$
$R_3 = 0.84925$
$R_4 = 1.21579$
$R_5 = 1.55035$
$R_6 = 2.13892$

$$R_1\text{-}\frac{(N_1\cdot N_3\cdot N_4)}{-3\cdot(N_2\text{-}N_2\cdot N_3)+(N_1\cdot N_3\cdot N_4)} = 0.00000 \qquad R_4\text{-}\frac{(N_1\cdot N_3\cdot N_4)}{1\cdot(N_2\text{-}N_2\cdot N_3)+(N_1\cdot N_3\cdot N_4)} = 0.00000$$

$$R_2\text{-}\frac{(N_1\cdot N_3\cdot N_4)}{-2\cdot(N_2\text{-}N_2\cdot N_3)+(N_1\cdot N_3\cdot N_4)} = 0.00000 \qquad R_5\text{-}\frac{(N_1\cdot N_3\cdot N_4)}{2\cdot(N_2\text{-}N_2\cdot N_3)+(N_1\cdot N_3\cdot N_4)} = 0.00000$$

$$R_5\text{-}\frac{(N_1\cdot N_3\cdot N_4)}{-1\cdot(N_2\text{-}N_2\cdot N_3)+(N_1\cdot N_3\cdot N_4)} = 0.00000 \qquad R_6\text{-}\frac{(N_1\cdot N_3\cdot N_4)}{3\cdot(N_2\text{-}N_2\cdot N_3)+(N_1\cdot N_3\cdot N_4)} = 0.00000$$

$AB := 1$

$N_1 := 1.63207$

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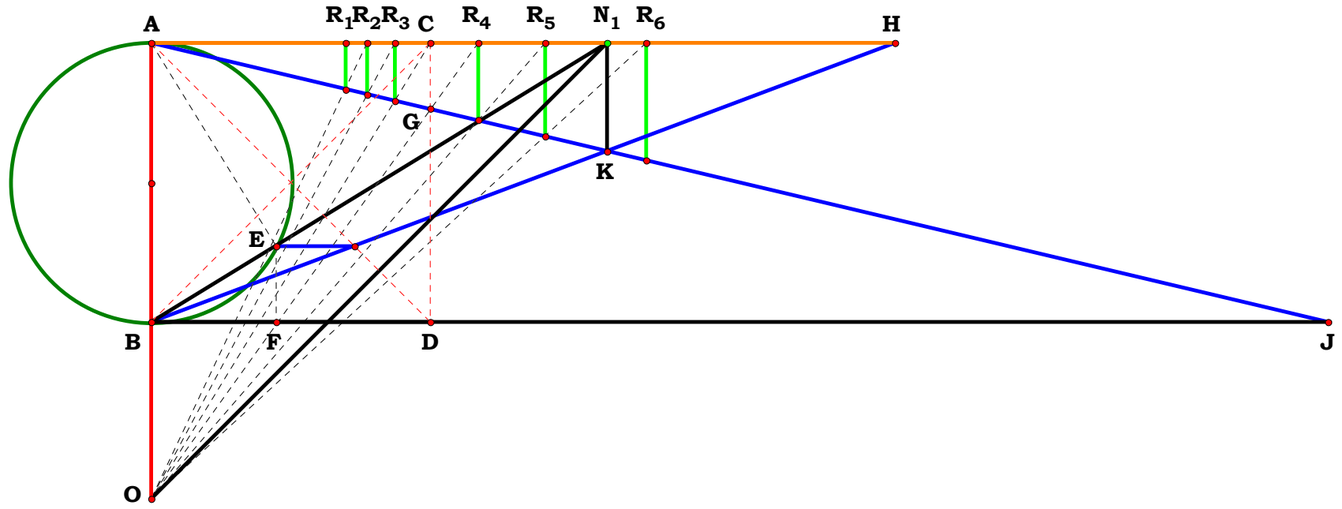
$N_1 = 1.63207$
$R_1 = 0.69629$
$R_2 = 0.77472$
$R_3 = 0.87306$
$R_4 = 1.17013$
$R_5 = 1.41002$
$R_6 = 1.77363$



$BN_1 := \sqrt{AB^2 + N_1^2}$ $\quad BE := \frac{AB^2}{BN_1}$ $\quad EF := \frac{BE}{BN_1}$

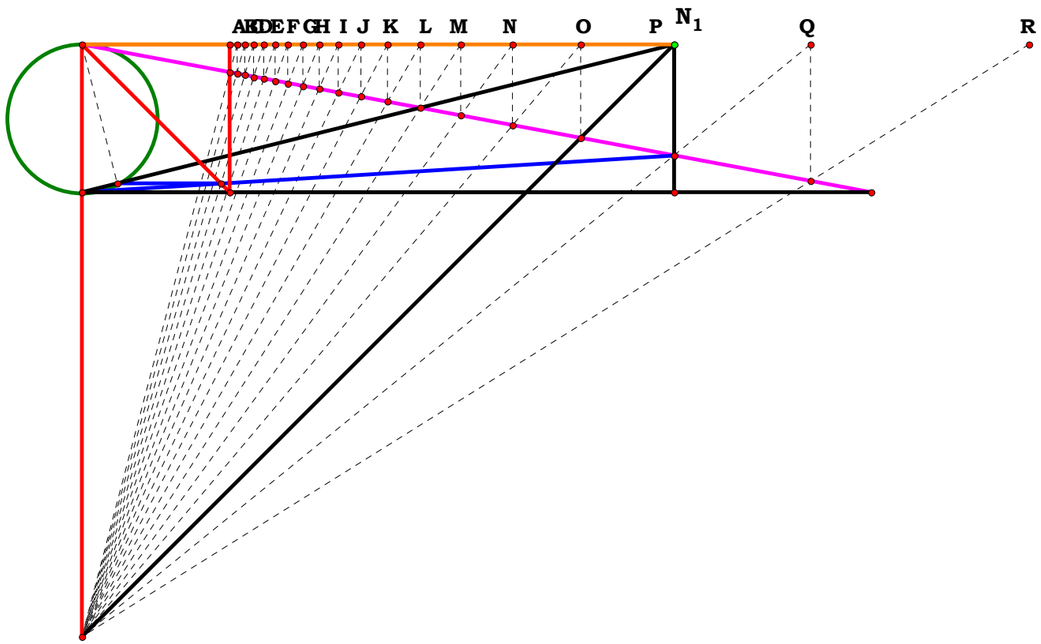
$AH := \frac{1 - EF}{EF}$ $\quad KN_1 := 1 - \frac{N_1}{AH}$ $\quad BJ := \frac{N_1}{KN_1}$

$CG := \frac{1}{BJ}$ $\quad CG - \frac{N_1 - 1}{N_1^2} = 0$ $\quad R_4 := \frac{N_1}{N_1 - CG}$ $\quad R_5 := \frac{N_1}{N_1 - 2 \cdot CG}$

$R_6 := \frac{N_1}{N_1 - 3 \cdot CG}$ $\quad R_3 := \frac{N_1}{N_1 + CG}$ $\quad R_2 := \frac{N_1}{N_1 + 2 \cdot CG}$ $\quad R_1 := \frac{N_1}{N_1 + 3 \cdot CG}$

$N_1 = 4.00000$

A = 1.04918	G = 1.48837	M = 2.56000	
B = 1.10345	H = 1.60000	N = 2.90909	
C = 1.16364	I = 1.72973	O = 3.36842	
D = 1.23077	J = 1.88235	P = 4.00000	
E = 1.30612	K = 2.06452	Q = 4.92308	
F = 1.39130	L = 2.28571	R = 6.40000	



$$\frac{N_1^3}{N_1^3 - \text{Index} \cdot (N_1 - 1)}$$

$R_1 - \frac{N_1^3}{N_1^3 - (N_1 - 1) \cdot -3} = 0$ $\quad R_2 - \frac{N_1^3}{N_1^3 + 2 \cdot N_1 - 2} = 0$

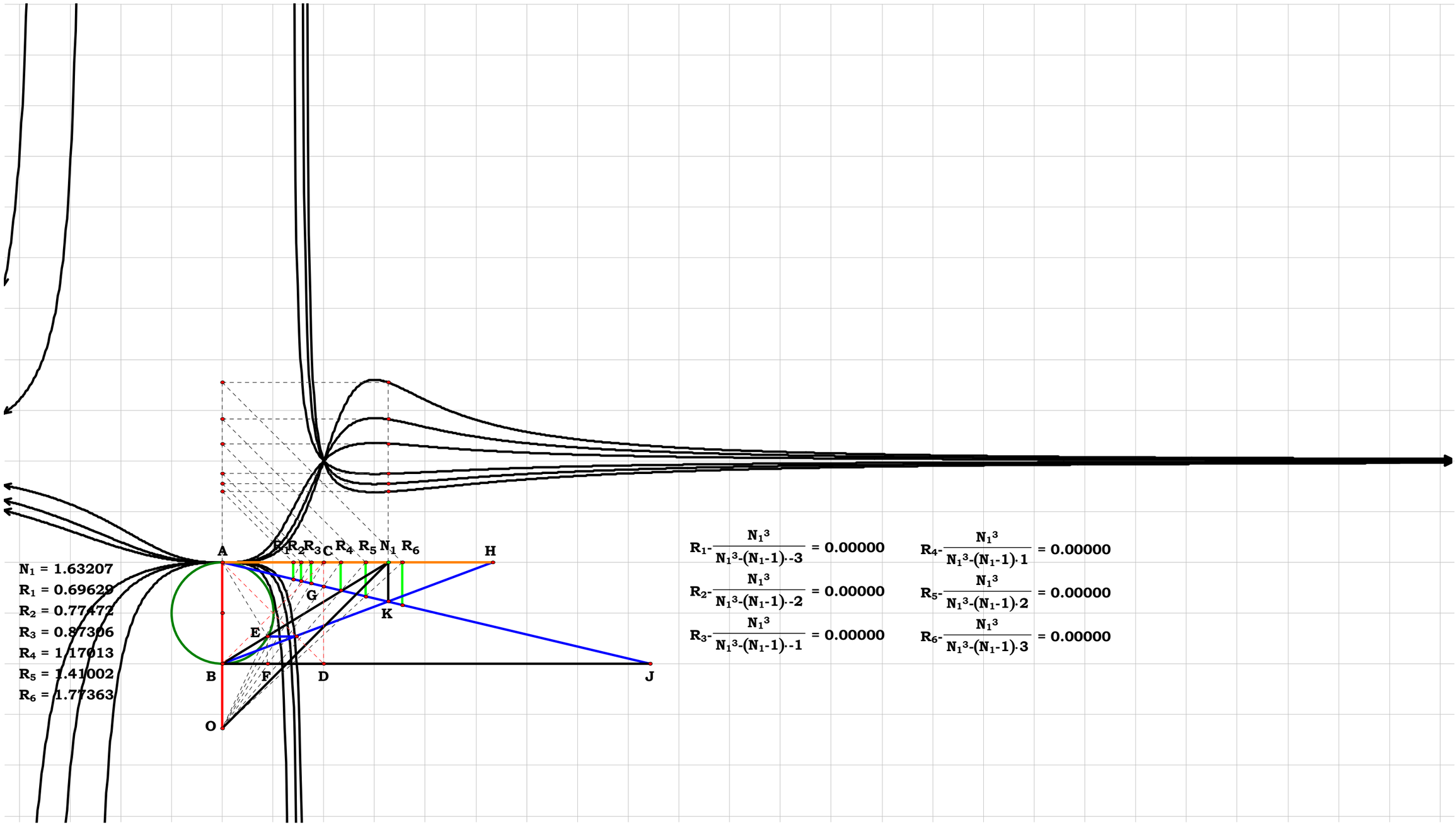
$R_3 - \frac{N_1^3}{N_1^3 + N_1 - 1} = 0$ $\quad R_4 - \frac{N_1^3}{N_1^3 - N_1 + 1} = 0$

$R_5 - \frac{N_1^3}{N_1^3 - 2 \cdot N_1 + 2} = 0$ $\quad R_6 - \frac{N_1^3}{N_1^3 - 3 \cdot N_1 + 3} = 0$

$R_1 = 0.696289$ $\quad R_4 = 1.170131$

$R_2 = 0.77472$ $\quad R_5 = 1.410019$

$R_3 = 0.873061$ $\quad R_6 = 1.773629$



$$R_1 - \frac{N_1^3}{N_1^3-(N_1-1)\cdot -3} = 0.00000 \qquad R_4 - \frac{N_1^3}{N_1^3-(N_1-1)\cdot 1} = 0.00000$$

$$R_2 - \frac{N_1^3}{N_1^3-(N_1-1)\cdot -2} = 0.00000 \qquad R_5 - \frac{N_1^3}{N_1^3-(N_1-1)\cdot 2} = 0.00000$$

$$R_3 - \frac{N_1^3}{N_1^3-(N_1-1)\cdot -1} = 0.00000 \qquad R_6 - \frac{N_1^3}{N_1^3-(N_1-1)\cdot 3} = 0.00000$$

$AB := 1$

$N_1 := 2.99687$

$N_2 := 2.21643$

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$$CE := \frac{1}{N_1}$$

$$R_4 := \frac{N_2}{N_2 - CE} \qquad R_5 := \frac{N_2}{N_2 - 2 \cdot CE} \qquad R_6 := \frac{N_2}{N_2 - 3 \cdot CE}$$

$$R_3 := \frac{N_2}{N_2 + CE} \qquad R_2 := \frac{N_2}{N_2 + 2 \cdot CE} \qquad R_1 := \frac{N_2}{N_2 + 3 \cdot CE}$$

$$\frac{N_1 \cdot N_2}{N_1 \cdot N_2 - Index}$$

$$R_4 - \frac{N_1 \cdot N_2}{N_1 \cdot N_2 - 1} = 0 \qquad R_5 - \frac{N_1 \cdot N_2}{N_1 \cdot N_2 - 2} = 0$$

$$R_6 - \frac{N_1 \cdot N_2}{N_1 \cdot N_2 - 3} = 0 \qquad R_3 - \frac{N_1 \cdot N_2}{N_1 \cdot N_2 - -1} = 0$$

$$R_2 - \frac{N_1 \cdot N_2}{N_1 \cdot N_2 - -2} = 0 \qquad R_1 - \frac{N_1 \cdot N_2}{N_1 \cdot N_2 - -3} = 0$$

$R_1 = 0.688873$

$R_2 = 0.768582$

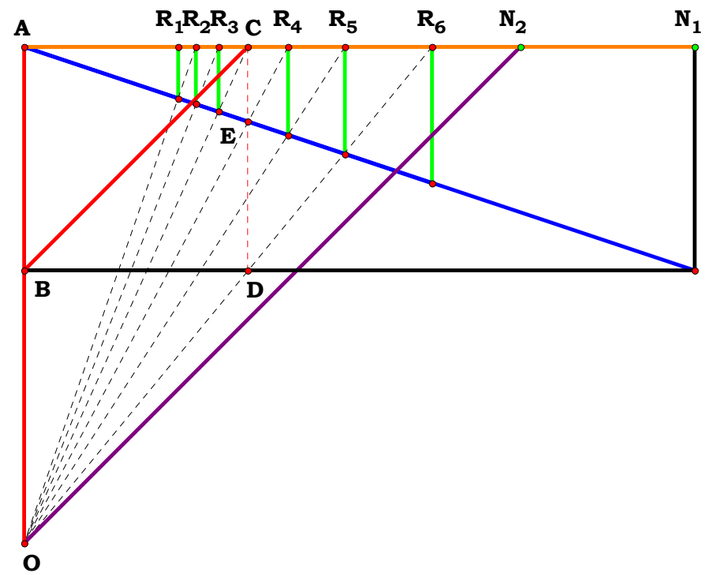
$R_3 = 0.86915$

$R_4 = 1.177231$

$R_5 = 1.430816$

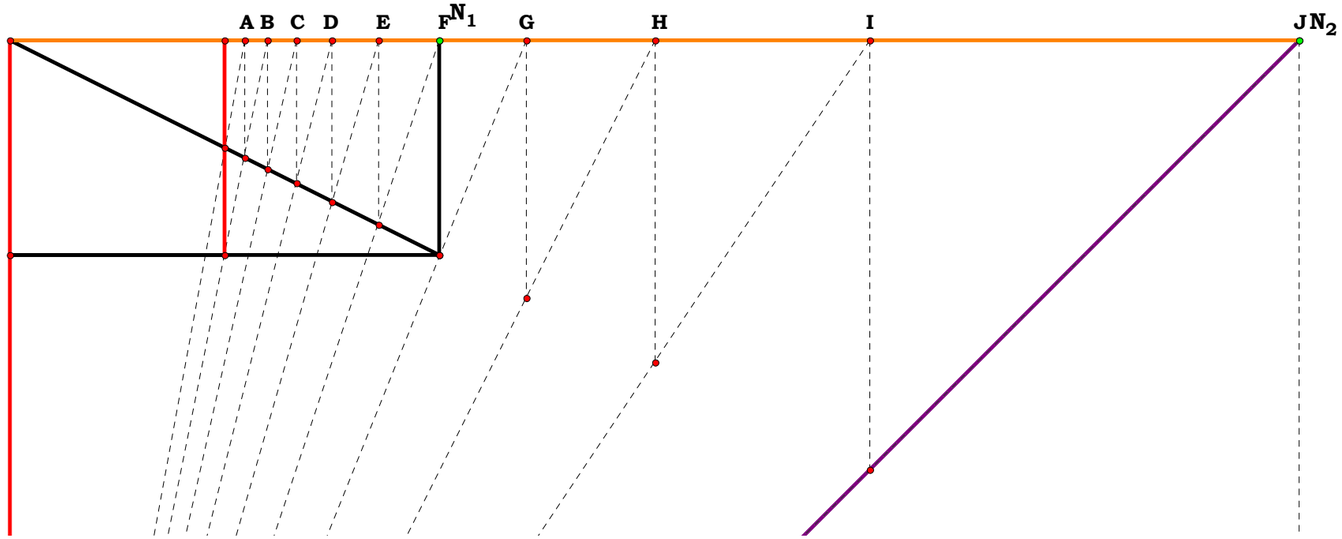
$R_6 = 1.823643$

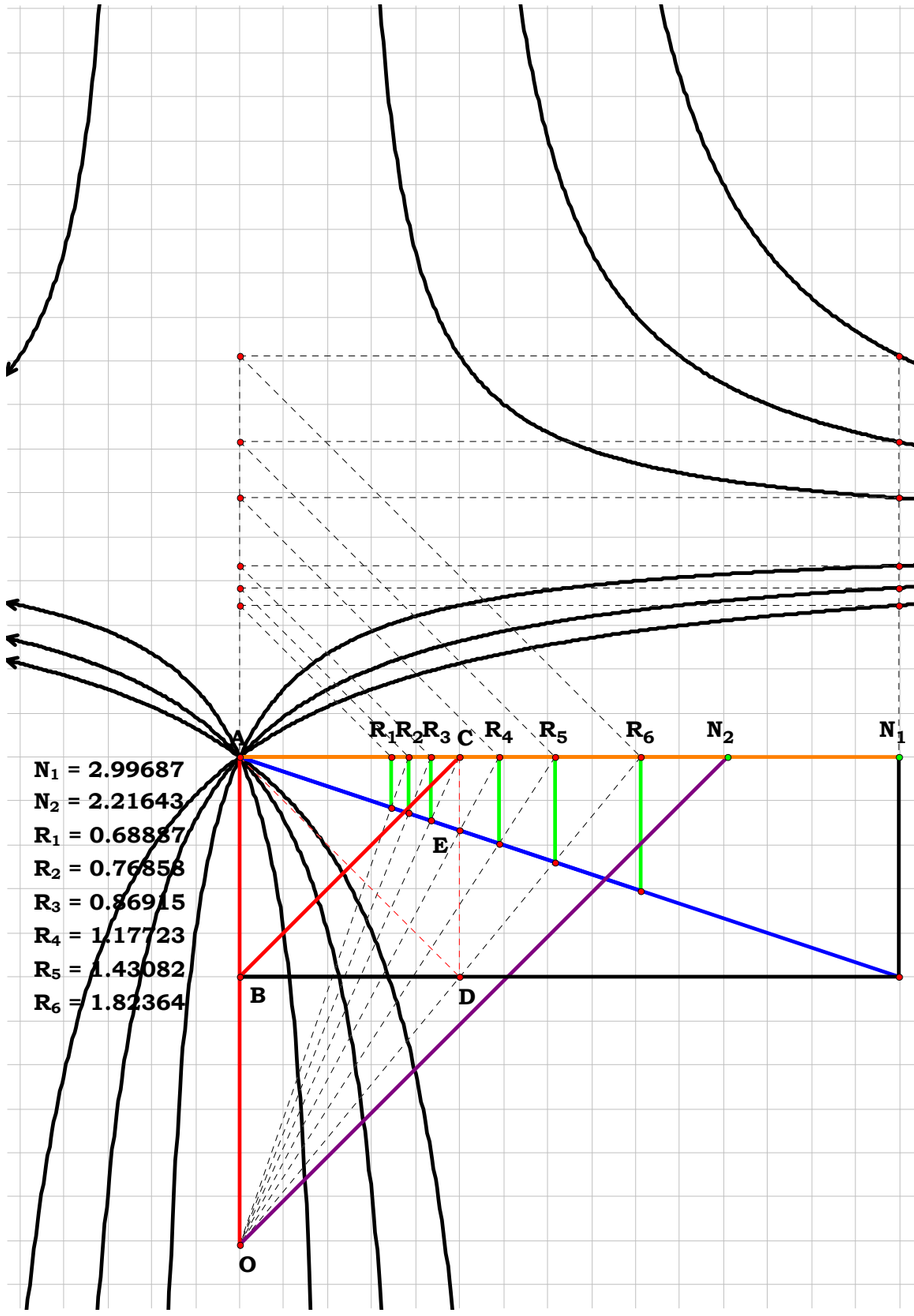
$N_1 = 2.99687$
$N_2 = 2.21643$
$R_1 = 0.68887$
$R_2 = 0.76858$
$R_3 = 0.86915$
$R_4 = 1.17723$
$R_5 = 1.43082$
$R_6 = 1.82364$



$N_1 = 2.00000$
$N_2 = 6.00000$

A = 1.09091	G = 2.40000	M = -12.00000
B = 1.20000	H = 3.00000	N = -6.00000
C = 1.33333	I = 4.00000	O = -4.00000
D = 1.50000	J = 6.00000	P = -3.00000
E = 1.71429	K = 12.00000	Q = -2.40000
F = 2.00000	L = $-8.34511 \cdot 10^{13}$	R = -2.00000





$N_1 = 2.99687$
$N_2 = 2.21643$
$R_1 = 0.68887$
$R_2 = 0.76858$
$R_3 = 0.86915$
$R_4 = 1.17723$
$R_5 = 1.43082$
$R_6 = 1.82364$

$$R_1\text{-}\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)\text{-}1\text{--}3} = 0.00000 \qquad R_4\text{-}\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)\text{-}1 \cdot 1} = 0.00000$$

$$R_2\text{-}\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)\text{-}1\text{--}2} = 0.00000 \qquad R_5\text{-}\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)\text{-}1 \cdot 2} = 0.00000$$

$$R_3\text{-}\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)\text{-}1\text{--}1} = 0.00000 \qquad R_6\text{-}\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)\text{-}1 \cdot 3} = 0.00000$$

$AB := 1$

$N_1 := 4.76977$

$N_2 := 3.17324$

$N_3 := .56832$

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$$R_4 := \frac{N_1}{N_2} \qquad AO := 1 + N_3 \qquad EH := \frac{N_1 - R_4}{N_1}$$

$$R_5 := \frac{AO \cdot R_4}{EH + N_3} \qquad R_6 := \frac{AO \cdot R_5}{\frac{N_1 - R_5}{N_1} + N_3}$$

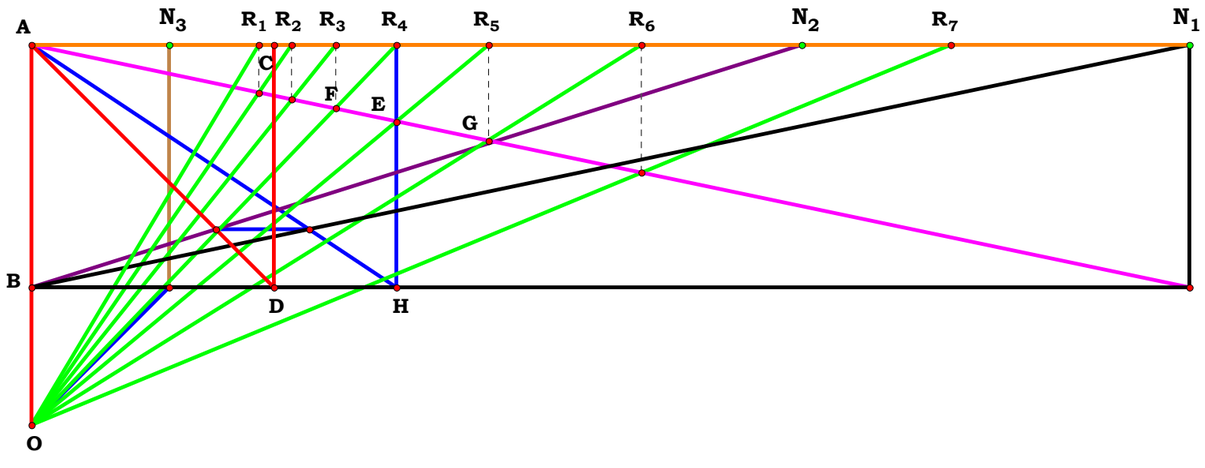
$$R_4 - \frac{N_1 \cdot (N_3 + 1)}{N_2 + N_2 \cdot N_3} = 0 \qquad R_5 - \frac{N_1 \cdot (N_3 + 1)}{N_2 + N_2 \cdot N_3 - 1} = 0$$

$$R_6 - \frac{N_1 \cdot (N_3 + 1)}{N_2 + N_2 \cdot N_3 - 2} = 0 \qquad \frac{N_1 \cdot (N_3 + 1)}{N_2 + N_2 \cdot N_3 + 1} = 1.251624$$

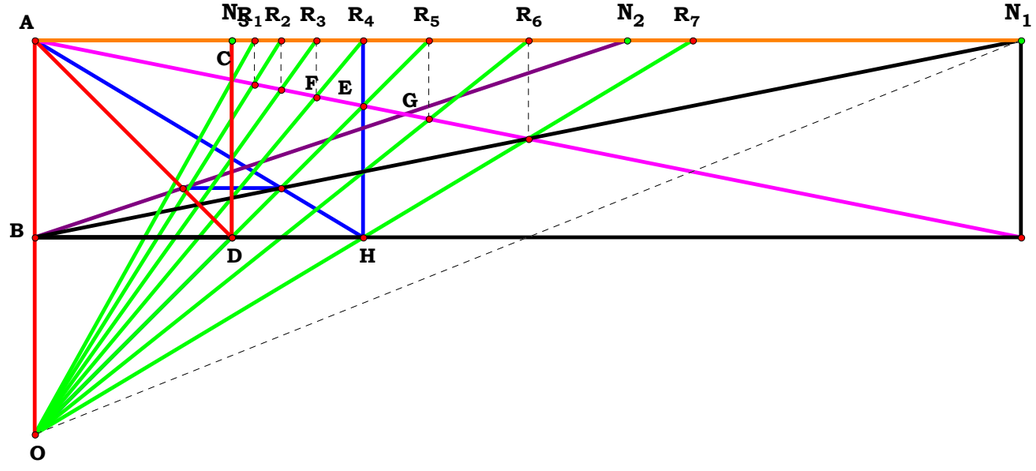
$$\frac{N_1 \cdot (N_3 + 1)}{N_2 + N_2 \cdot N_3 + 2} = 1.072222 \qquad \frac{N_1 \cdot (N_3 + 1)}{N_2 + N_2 \cdot N_3 + 3} = 0.937802$$

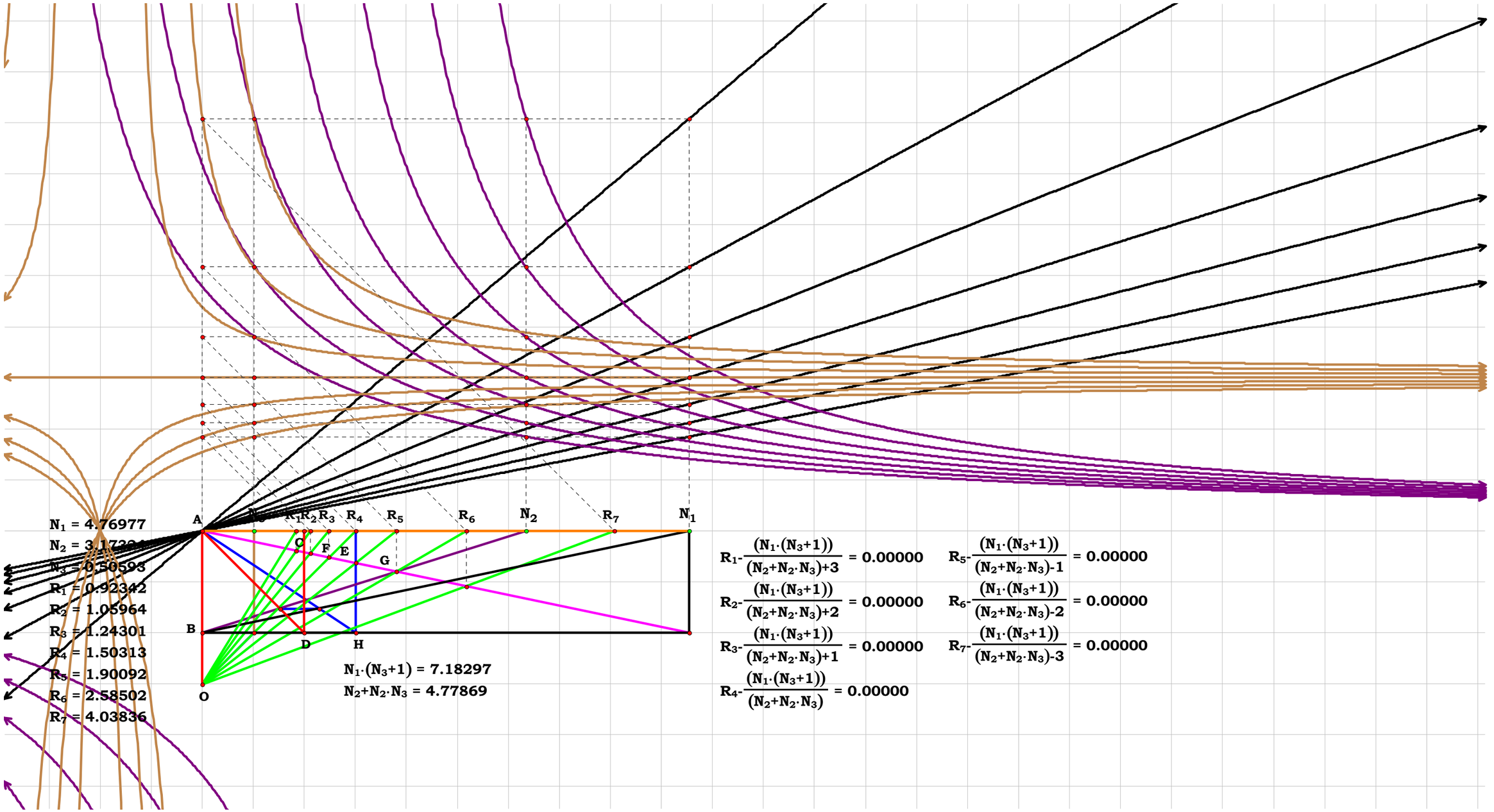
$$\frac{N_1 \cdot (N_3 + 1)}{N_2 + N_2 \cdot N_3 - 3} = 3.784435 \qquad \frac{N_1 \cdot (N_3 + 1)}{N_2 + N_2 \cdot N_3 - \text{Index}}$$

$N_1 = 4.76977$
$N_2 = 3.17324$
$N_3 = 0.56832$
$R_1 = 0.93780$
$R_2 = 1.07222$
$R_3 = 1.25163$
$R_4 = 1.50313$
$R_5 = 1.88112$
$R_6 = 2.51308$
$R_7 = 3.78447$



$N_1 = 5.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$R_1 = 1.11111$
$R_2 = 1.25000$
$R_3 = 1.42857$
$R_4 = 1.66667$
$R_5 = 2.00000$
$R_6 = 2.50000$
$R_7 = 3.33333$





N1 = 4.76977
N2 = 3.17394
N3 = 0.50593
R1 = 0.92342
R2 = 1.05964
R3 = 1.24301
R4 = 1.50313
R5 = 1.90092
R6 = 2.58502
R7 = 4.03836
A
B
C
D
E
F
G
H
O
N1
N2
R1
R2
R3
R4
R5
R6
R7
N1·(N3+1) = 7.18297
N2+N2·N3 = 4.77869
R1-(N1·(N3+1))/((N2+N2·N3)+3) = 0.00000
R2-(N1·(N3+1))/((N2+N2·N3)+2) = 0.00000
R3-(N1·(N3+1))/((N2+N2·N3)+1) = 0.00000
R4-(N1·(N3+1))/((N2+N2·N3)) = 0.00000
R5-(N1·(N3+1))/((N2+N2·N3)-1) = 0.00000
R6-(N1·(N3+1))/((N2+N2·N3)-2) = 0.00000
R7-(N1·(N3+1))/((N2+N2·N3)-3) = 0.00000

$AB := 1$

$N_1 := 3.81433$

$N_2 := 6$

Fractional Series Introduction 4

$$DE := \frac{1}{N_1} \quad BF := \frac{N_2}{1 - DE} \quad CG := \frac{1}{BF}$$

$$R_1 := \frac{1}{1 - CG}$$

$$R_1 - \frac{N_1 \cdot N_2}{N_1 \cdot N_2 - (N_1 - 1)} = 0$$

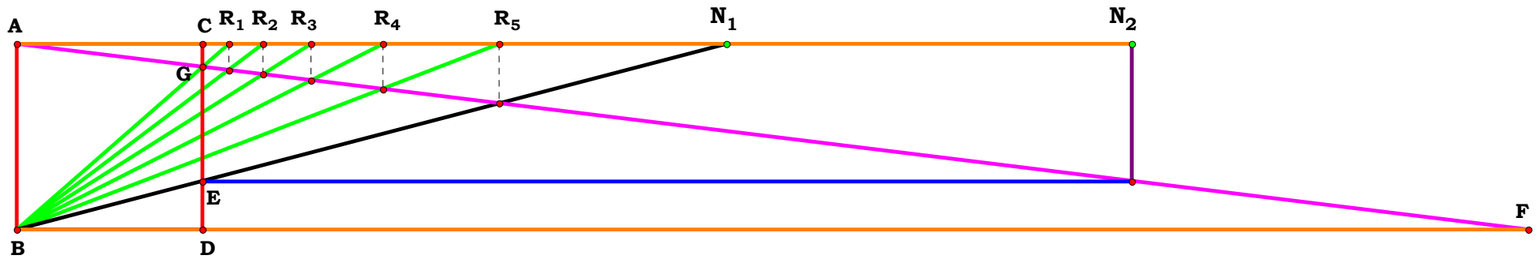
$$\frac{N_1 \cdot N_2}{N_1 \cdot N_2 - \text{Index} \cdot (N_1 - 1)}$$

$$\frac{N_1 \cdot N_2}{N_1 \cdot N_2 - (N_1 - 1) \cdot 2} = 1.326161$$

$$\frac{N_1 \cdot N_2}{N_1 \cdot N_2 - (N_1 - 1) \cdot 3} = 1.584574$$

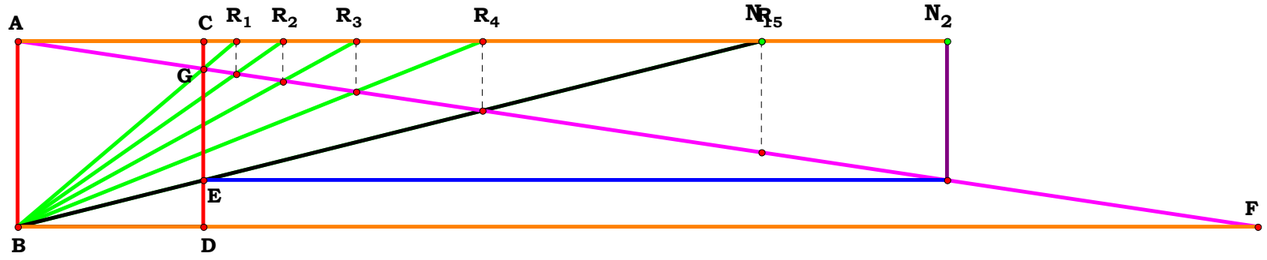
$$\frac{N_1 \cdot N_2}{N_1 \cdot N_2 - (N_1 - 1) \cdot 4} = 1.968067$$

$$\frac{N_1 \cdot N_2}{N_1 \cdot N_2 - (N_1 - 1) \cdot 5} = 2.596451$$



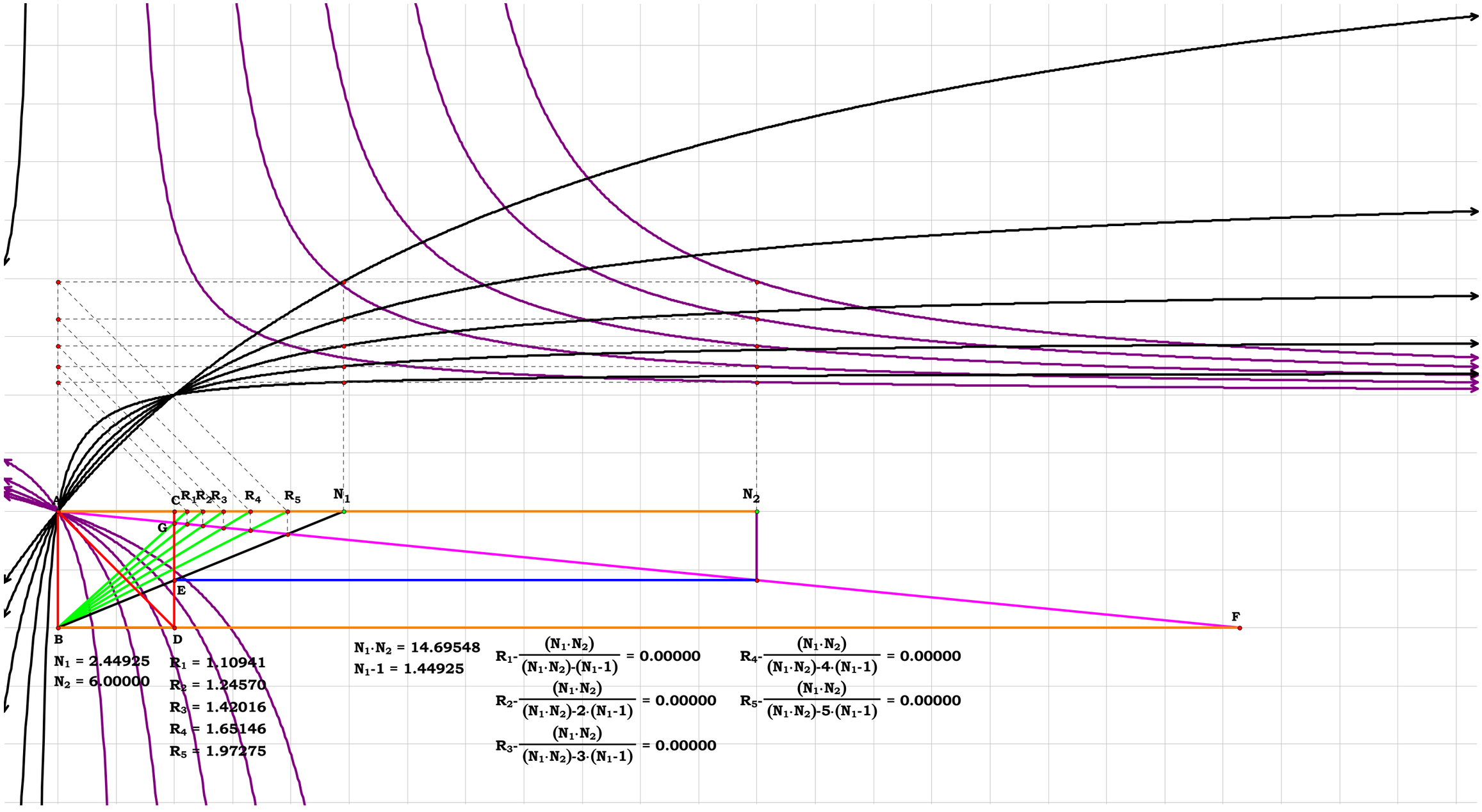
$N_1 = 3.81433$
$N_2 = 6.00000$

$R_1 = 1.14021$
$R_2 = 1.32616$
$R_3 = 1.58457$
$R_4 = 1.96807$
$R_5 = 2.59645$



$N_1 = 4.00000$
$N_2 = 5.00000$

$R_1 = 1.17647$
$R_2 = 1.42857$
$R_3 = 1.81818$
$R_4 = 2.50000$
$R_5 = 4.00000$



$N_1 = 2.44925$

$N_2 = 6.00000$

$R_1 = 1.10941$

$R_2 = 1.24570$

$R_3 = 1.42016$

$R_4 = 1.65146$

$R_5 = 1.97275$

$N_1 \cdot N_2 = 14.69548$

$N_1 - 1 = 1.44925$

$$R_1 - \frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - (N_1 - 1)} = 0.00000$$

$$R_2 - \frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 2 \cdot (N_1 - 1)} = 0.00000$$

$$R_3 - \frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 3 \cdot (N_1 - 1)} = 0.00000$$

$$R_4 - \frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 4 \cdot (N_1 - 1)} = 0.00000$$

$$R_5 - \frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 5 \cdot (N_1 - 1)} = 0.00000$$

$AB := 1$

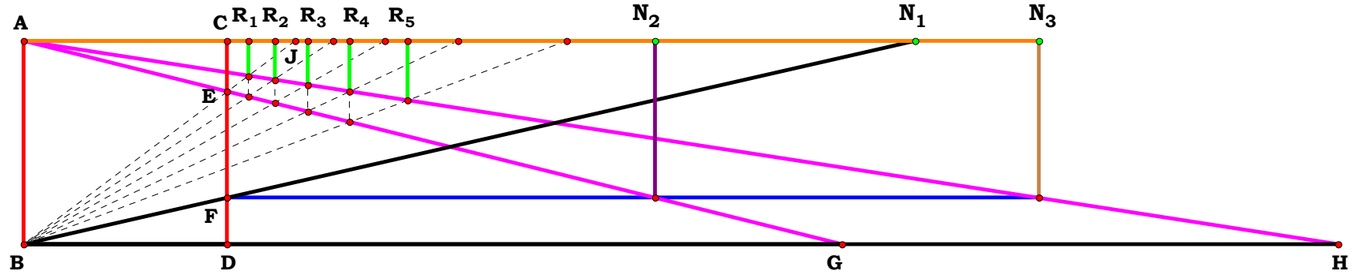
$N_1 := 4.37776$

$N_2 := 3.10140$

$N_3 := 4.98355$

Fractional Series Introduction 5

$N_1 = 4.37776$
$N_2 = 3.10140$
$N_3 = 4.98355$
$R_1 = 1.10370$
$R_2 = 1.23140$
$R_3 = 1.39252$
$R_4 = 1.60214$
$R_5 = 1.88605$



$$DF := \frac{1}{N_1} \qquad BG := \frac{N_2}{1 - DF} \qquad BH := \frac{N_3}{1 - DF}$$

$$CE := \frac{1}{BG} \qquad AJ := \frac{1}{1 - CE} \qquad R_1 := \frac{BH \cdot AJ}{BH + AJ}$$

$$R_1 - \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 + (N_1 - 1) \cdot (N_2 - N_3)} = 0$$

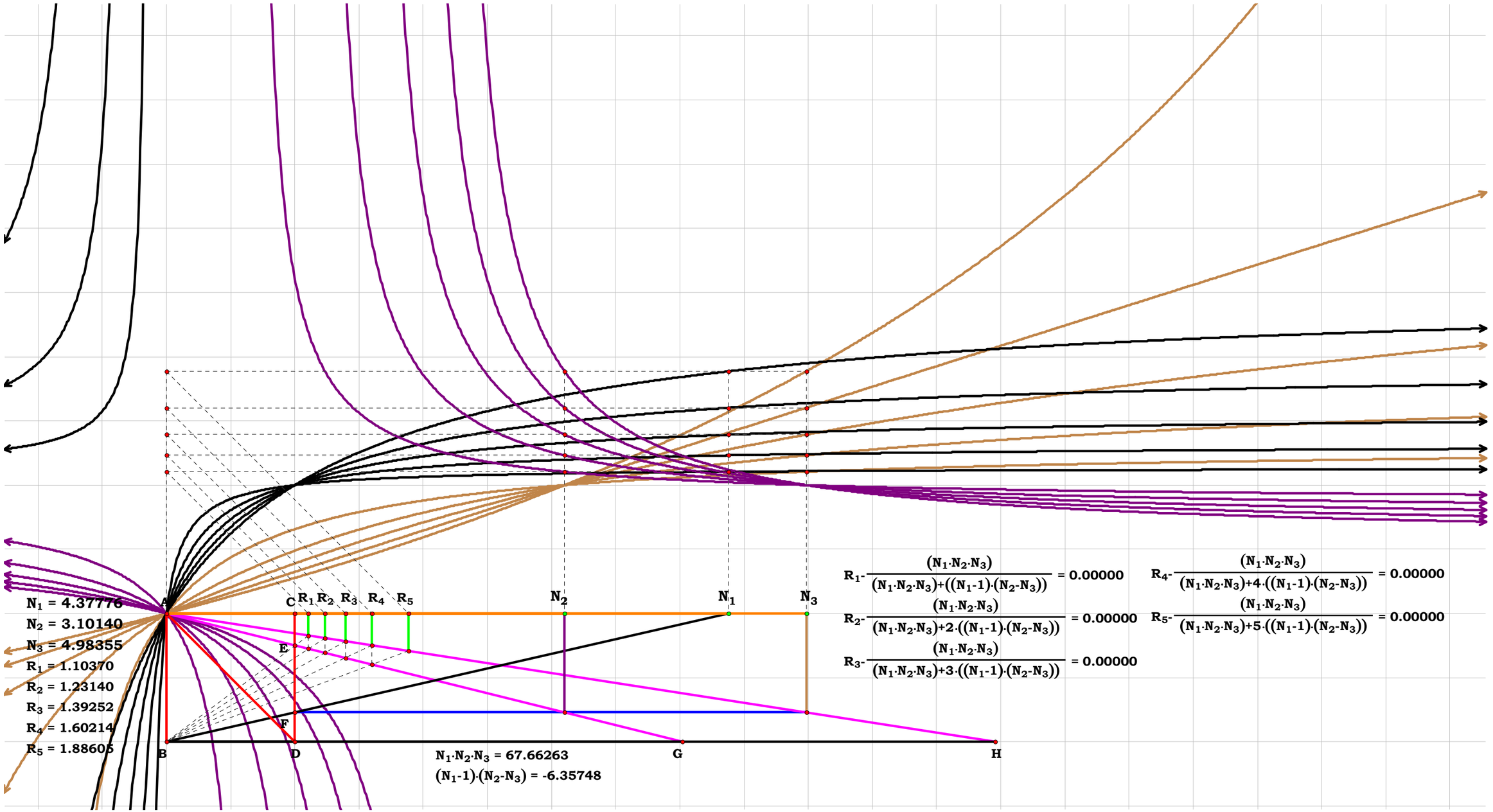
$$\frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 + Index \cdot (N_1 - 1) \cdot (N_2 - N_3)}$$

$$\frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 + 2 \cdot (N_1 - 1) \cdot (N_2 - N_3)} = 1.2314$$

$$\frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 + 3 \cdot (N_1 - 1) \cdot (N_2 - N_3)} = 1.392514$$

$$\frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 + 4 \cdot (N_1 - 1) \cdot (N_2 - N_3)} = 1.602134$$

$$\frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 + 5 \cdot (N_1 - 1) \cdot (N_2 - N_3)} = 1.886048$$


N1 = 4.37776
N2 = 3.10140
N3 = 4.98355
R1 = 1.10370
R2 = 1.23140
R3 = 1.39252
R4 = 1.60214
R5 = 1.88605
A
B
C
D
E
F
G
H
R1 R2 R3 R4 R5
N2
N1
N3
N1·N2·N3 = 67.66263
(N1-1)·(N2-N3) = -6.35748
R1- (N1·N2·N3)/((N1·N2·N3)+((N1-1)·(N2-N3))) = 0.00000
R2- (N1·N2·N3)/((N1·N2·N3)+2·((N1-1)·(N2-N3))) = 0.00000
R3- (N1·N2·N3)/((N1·N2·N3)+3·((N1-1)·(N2-N3))) = 0.00000
R4- (N1·N2·N3)/((N1·N2·N3)+4·((N1-1)·(N2-N3))) = 0.00000
R5- (N1·N2·N3)/((N1·N2·N3)+5·((N1-1)·(N2-N3))) = 0.00000

$N = 10.00000$

$F_1 = 1.11111$

$F_2 = 1.25000$

$F_3 = 1.42857$

$F_4 = 1.66667$

$F_5 = 2.00000$

$F_6 = 2.50000$

$F_7 = 3.33333$

$F_8 = 5.00000$

$\frac{N}{N-1} - F_1 = 0.00000$

$\frac{N}{N-2} - F_2 = 0.00000$

$\frac{N}{N-3} - F_3 = 0.00000$

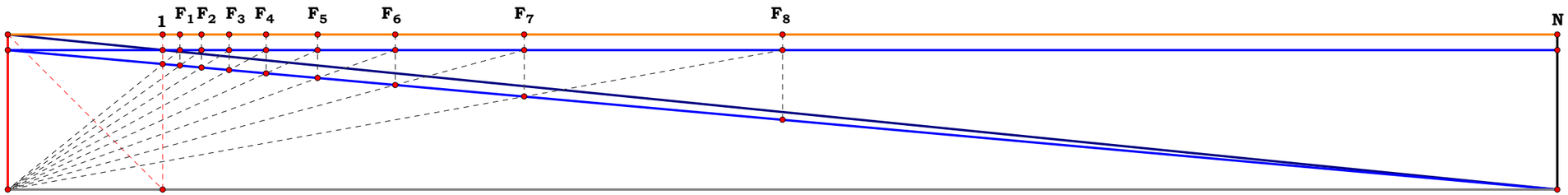
$\frac{N}{N-4} - F_4 = 0.00000$

$\frac{N}{N-5} - F_5 = 0.00000$

$\frac{N}{N-6} - F_6 = 0.00000$

$\frac{N}{N-7} - F_7 = 0.00000$

$\frac{N}{N-8} - F_8 = 0.00000$



$N_1 = 5.00000$

$F_1 = 1.19048$

$F_2 = 1.47059$

$F_3 = 1.92308$

$F_4 = 2.77778$

$F_5 = 5.00000$

$N_1^2 = 25.00000$

$N_1-1 = 4.00000$

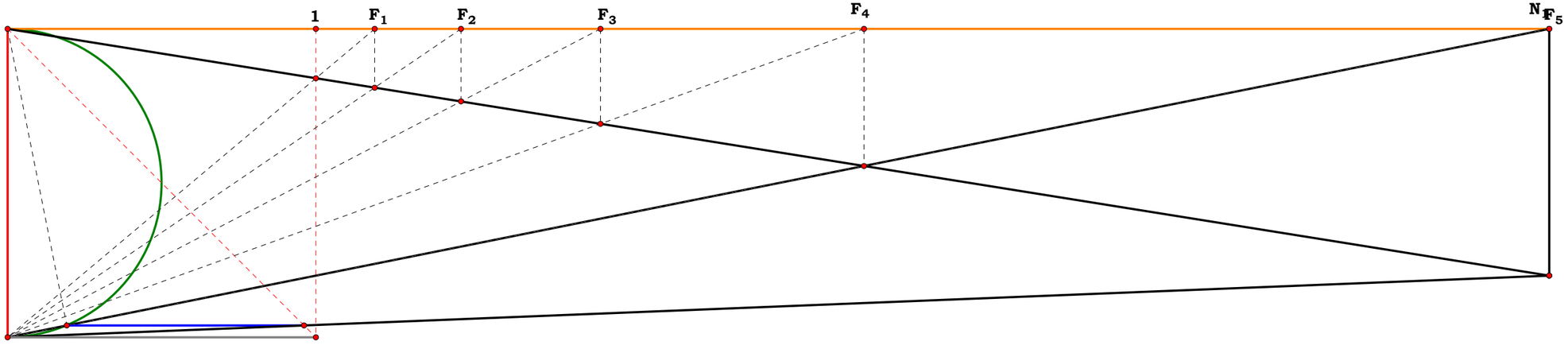
$$\frac{N_1^2}{N_1^2-(N_1-1)}-F_1 = 0.00000$$

$$\frac{N_1^2}{N_1^2-2\cdot(N_1-1)}-F_2 = 0.00000$$

$$\frac{N_1^2}{N_1^2-3\cdot(N_1-1)}-F_3 = 0.00000$$

$$\frac{N_1^2}{N_1^2-4\cdot(N_1-1)}-F_4 = 0.00000$$

$$\frac{N_1^2}{N_1^2-5\cdot(N_1-1)}-F_5 = 0.00000$$



$N_1 = 10.00000$

$F_1 = 1.09890$

$F_2 = 1.21951$

$F_3 = 1.36986$

$F_4 = 1.56250$

$F_5 = 1.81818$

$F_6 = 2.17391$

$F_7 = 2.70270$

$F_8 = 3.57143$

$F_9 = 5.26316$

$N_1^2 = 100.00000$

$N_1 - 1 = 9.00000$

$$\frac{N_1^2}{N_1^2-(N_1-1)} - F_1 = 0.00000$$

$$\frac{N_1^2}{N_1^2-2\cdot(N_1-1)} - F_2 = 0.00000$$

$$\frac{N_1^2}{N_1^2-3\cdot(N_1-1)} - F_3 = 0.00000$$

$$\frac{N_1^2}{N_1^2-4\cdot(N_1-1)} - F_4 = 0.00000$$

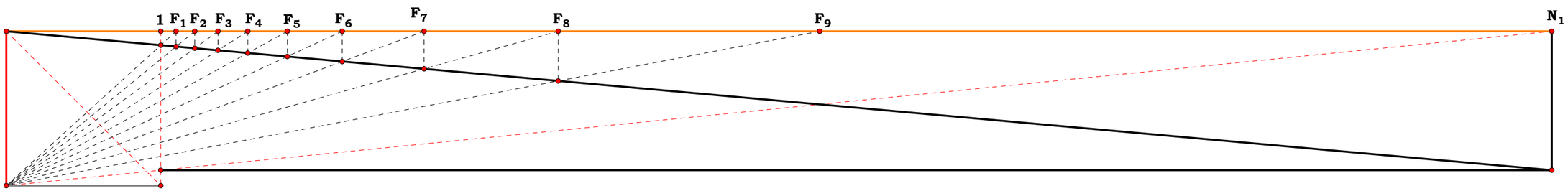
$$\frac{N_1^2}{N_1^2-5\cdot(N_1-1)} - F_5 = 0.00000$$

$$\frac{N_1^2}{N_1^2-6\cdot(N_1-1)} - F_6 = 0.00000$$

$$\frac{N_1^2}{N_1^2-7\cdot(N_1-1)} - F_7 = 0.00000$$

$$\frac{N_1^2}{N_1^2-8\cdot(N_1-1)} - F_8 = 0.00000$$

$$\frac{N_1^2}{N_1^2-9\cdot(N_1-1)} - F_9 = 0.00000$$



$N = 10.00000$

$F_1 = 1.10989$

$F_2 = 1.24691$

$F_3 = 1.42254$

$F_4 = 1.65574$

$F_5 = 1.98039$

$F_6 = 2.46341$

$F_7 = 3.25806$

$F_8 = 4.80952$

$F_9 = 9.18182$

$N^2+1 = 101.00000$

$\frac{(N^2+1)}{(N^2+1)-N} - F_1 = 0.00000$

$\frac{(N^2+1)}{(N^2+1)-2 \cdot N} - F_2 = 0.00000$

$\frac{(N^2+1)}{(N^2+1)-3 \cdot N} - F_3 = 0.00000$

$\frac{(N^2+1)}{(N^2+1)-4 \cdot N} - F_4 = 0.00000$

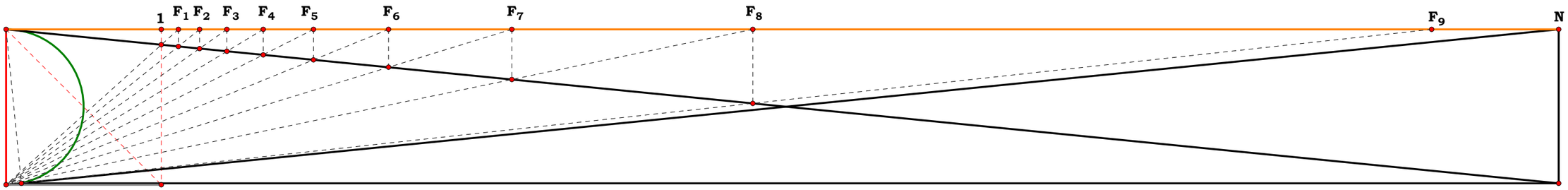
$\frac{(N^2+1)}{(N^2+1)-5 \cdot N} - F_5 = 0.00000$

$\frac{(N^2+1)}{(N^2+1)-6 \cdot N} - F_6 = 0.00000$

$\frac{(N^2+1)}{(N^2+1)-7 \cdot N} - F_7 = 0.00000$

$\frac{(N^2+1)}{(N^2+1)-8 \cdot N} - F_8 = 0.00000$

$\frac{(N^2+1)}{(N^2+1)-9 \cdot N} - F_9 = 0.00000$



$N_1 = 4.00000$
$F_1 = 1.04918$
$F_2 = 1.10345$
$F_3 = 1.16364$
$F_4 = 1.23077$
$F_5 = 1.30612$
$F_6 = 1.39130$
$F_7 = 1.48837$
$F_8 = 1.60000$
$F_9 = 1.72973$
$F_{10} = 1.88235$
$F_{11} = 2.06452$
$F_{12} = 2.28571$
$F_{13} = 2.56000$
$F_{14} = 2.90909$
$F_{15} = 3.36842$

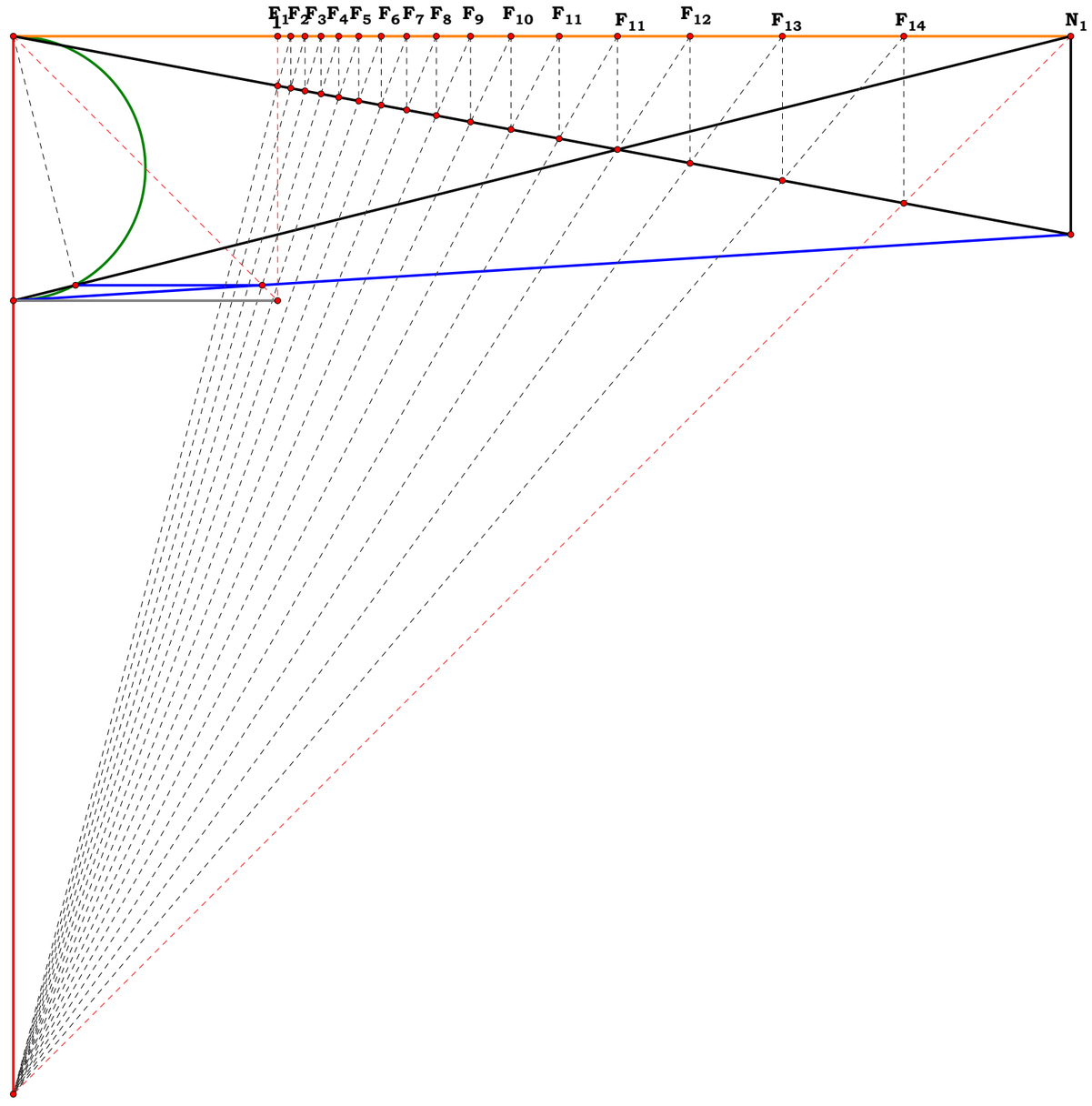
$N_1^3 = 64.00000$
$N_1-1 = 3.00000$

$$\frac{N_1^3}{N_1^3-(N_1-1)}-F_1 = 0.00000 \qquad \frac{N_1^3}{N_1^3-2\cdot(N_1-1)}-F_2 = 0.00000 \qquad \frac{N_1^3}{N_1^3-3\cdot(N_1-1)}-F_3 = 0.00000 \qquad \frac{N_1^3}{N_1^3-4\cdot(N_1-1)}-F_4 = 0.00000$$

$$\frac{N_1^3}{N_1^3-5\cdot(N_1-1)}-F_5 = 0.00000 \qquad \frac{N_1^3}{N_1^3-6\cdot(N_1-1)}-F_6 = 0.00000 \qquad \frac{N_1^3}{N_1^3-7\cdot(N_1-1)}-F_7 = 0.00000 \qquad \frac{N_1^3}{N_1^3-8\cdot(N_1-1)}-F_8 = 0.00000$$

$$\frac{N_1^3}{N_1^3-9\cdot(N_1-1)}-F_9 = 0.00000 \qquad \frac{N_1^3}{N_1^3-10\cdot(N_1-1)}-F_{10} = 0.00000 \qquad \frac{N_1^3}{N_1^3-11\cdot(N_1-1)}-F_{11} = 0.00000 \qquad \frac{N_1^3}{N_1^3-12\cdot(N_1-1)}-F_{12} = 0.00000$$

$$\frac{N_1^3}{N_1^3-13\cdot(N_1-1)}-F_{13} = 0.00000 \qquad \frac{N_1^3}{N_1^3-14\cdot(N_1-1)}-F_{14} = 0.00000 \qquad \frac{N_1^3}{N_1^3-15\cdot(N_1-1)}-F_{15} = 0.00000$$



$N = 5.00000$

$F_1 = 1.03960$ $F_2 = 1.08247$ $F_3 = 1.12903$ $F_4 = 1.17978$ $F_5 = 1.23529$

$F_6 = 1.29630$ $F_7 = 1.36364$ $F_8 = 1.43836$ $F_9 = 1.52174$ $F_{10} = 1.61538$

$F_{11} = 1.72131$ $F_{12} = 1.84211$ $F_{13} = 1.98113$ $F_{14} = 2.14286$ $F_{15} = 2.33333$

$F_{16} = 2.56098$ $F_{17} = 2.83784$ $F_{18} = 3.18182$ $F_{19} = 3.62069$ $F_{20} = 4.20000$

$N^3 = 125.00000$

$(N^3-N^2)+N = 105.00000$

$N-1 = 4.00000$

$F_0 = 1.19048$

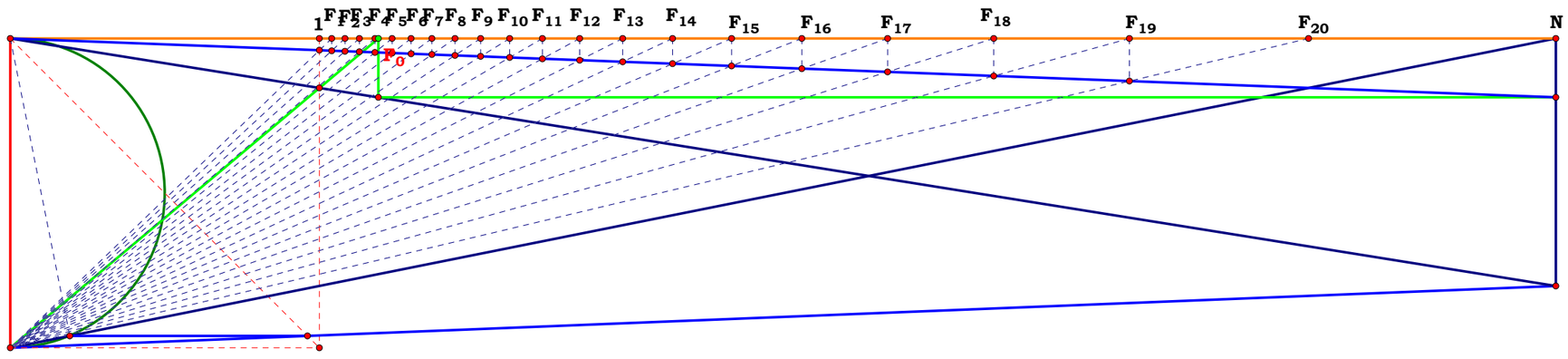
$$\frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+1)}-F_1 = 0.00000 \qquad \frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+6)}-F_6 = 0.00000 \qquad \frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+11)}-F_{11} = 0.00000 \qquad \frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+16)}-F_{16} = 0.00000$$

$$\frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+2)}-F_2 = 0.00000 \qquad \frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+7)}-F_7 = 0.00000 \qquad \frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+12)}-F_{12} = 0.00000 \qquad \frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+17)}-F_{17} = 0.00000$$

$$\frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+3)}-F_3 = 0.00000 \qquad \frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+8)}-F_8 = 0.00000 \qquad \frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+13)}-F_{13} = 0.00000 \qquad \frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+18)}-F_{18} = 0.00000$$

$$\frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+4)}-F_4 = 0.00000 \qquad \frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+9)}-F_9 = 0.00000 \qquad \frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+14)}-F_{14} = 0.00000 \qquad \frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+19)}-F_{19} = 0.00000$$

$$\frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+5)}-F_5 = 0.00000 \qquad \frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+10)}-F_{10} = 0.00000 \qquad \frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+15)}-F_{15} = 0.00000 \qquad \frac{((N^3-N^2)+N)}{N^3-(N-1)\cdot(N+20)}-F_{20} = 0.00000$$



$N = 9.00000$

$F_1 = 1.11111$

$F_2 = 1.25000$

$F_3 = 1.42857$

$F_4 = 1.66667$

$F_5 = 2.00000$

$F_6 = 2.50000$

$F_7 = 3.33333$

$F_8 = 5.00000$

$N+1 = 10.00000$

$\frac{(N+1)}{N} - F_1 = 0.00000$

$\frac{(N+1)}{N-1} - F_2 = 0.00000$

$\frac{(N+1)}{N-2} - F_3 = 0.00000$

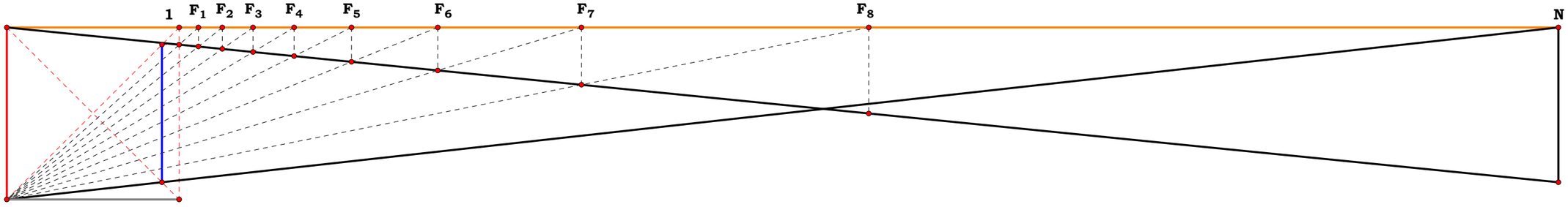
$\frac{(N+1)}{N-3} - F_4 = 0.00000$

$\frac{(N+1)}{N-4} - F_5 = 0.00000$

$\frac{(N+1)}{N-5} - F_6 = 0.00000$

$\frac{(N+1)}{N-6} - F_7 = 0.00000$

$\frac{(N+1)}{N-7} - F_8 = 0.00000$



$N_1 = 3.11160$

$N_1^3 = 30.12674$

$N_1-1 = 2.11160$

$F_1 = 1.07537$

$F_2 = 1.16304$

$F_3 = 1.26626$

$F_4 = 1.38959$

$F_5 = 1.53953$

$F_6 = 1.72576$

$F_7 = 1.96323$

$F_8 = 2.27648$

$F_9 = 2.70867$

$$\frac{N_1^3}{N_1^3-(N_1-1)}-F_1 = 0.00000$$

$$\frac{N_1^3}{N_1^3-2\cdot(N_1-1)}-F_2 = 0.00000$$

$$\frac{N_1^3}{N_1^3-3\cdot(N_1-1)}-F_3 = 0.00000$$

$$\frac{N_1^3}{N_1^3-4\cdot(N_1-1)}-F_4 = 0.00000$$

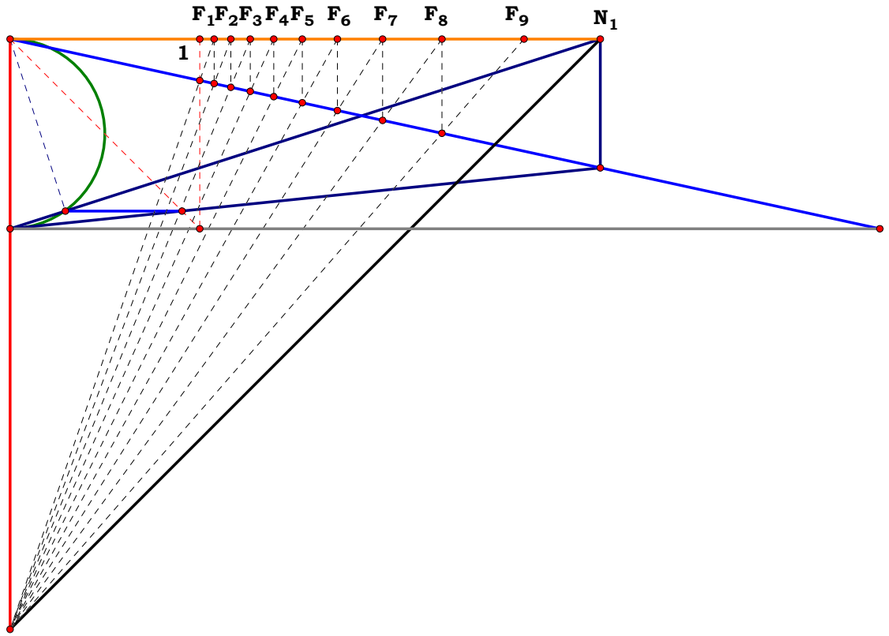
$$\frac{N_1^3}{N_1^3-5\cdot(N_1-1)}-F_5 = 0.00000$$

$$\frac{N_1^3}{N_1^3-6\cdot(N_1-1)}-F_6 = 0.00000$$

$$\frac{N_1^3}{N_1^3-7\cdot(N_1-1)}-F_7 = 0.00000$$

$$\frac{N_1^3}{N_1^3-8\cdot(N_1-1)}-F_8 = 0.00000$$

$$\frac{N_1^3}{N_1^3-9\cdot(N_1-1)}-F_9 = 0.00000$$



$N_1 = 11.00000$
$N_2 = 10.00000$

$F_1 = 1.10000$
$F_2 = 1.22222$
$F_3 = 1.37500$
$F_4 = 1.57143$
$F_5 = 1.83333$
$F_6 = 2.20000$
$F_7 = 2.75000$
$F_8 = 3.66667$
$F_9 = 5.50000$

$\frac{N_1}{N_2} - F_1 = 0.00000$

$\frac{N_1}{N_2-1} - F_2 = 0.00000$

$\frac{N_1}{N_2-2} - F_3 = 0.00000$

$\frac{N_1}{N_2-3} - F_4 = 0.00000$

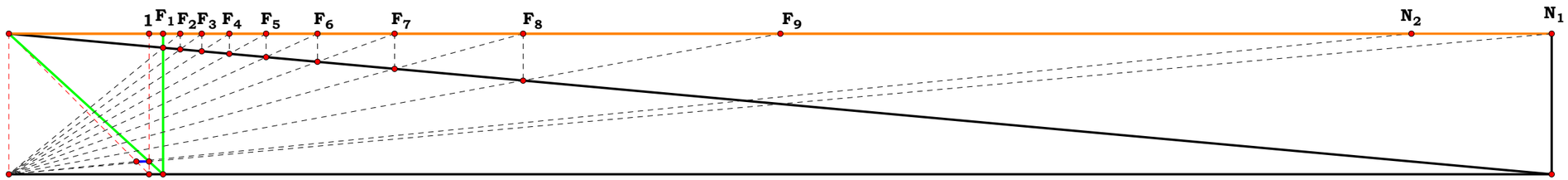
$\frac{N_1}{N_2-4} - F_5 = 0.00000$

$\frac{N_1}{N_2-5} - F_6 = 0.00000$

$\frac{N_1}{N_2-6} - F_7 = 0.00000$

$\frac{N_1}{N_2-7} - F_8 = 0.00000$

$\frac{N_1}{N_2-8} - F_9 = 0.00000$



If I want to divide any value whatsoever into any number of fractions whatsoever.

$N_1 = 8.00000$

$N_2 = 10.00000$

$N_1 \cdot N_2 = 80.00000$

$N_1 - 1 = 7.00000$

$F_1 = 1.09589$

$F_2 = 1.21212$

$F_3 = 1.35593$

$F_4 = 1.53846$

$F_5 = 1.77778$

$F_6 = 2.10526$

$F_7 = 2.58065$

$F_8 = 3.33333$

$F_9 = 4.70588$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - (N_1 - 1)} - F_1 = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 2 \cdot (N_1 - 1)} - F_2 = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 3 \cdot (N_1 - 1)} - F_3 = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 4 \cdot (N_1 - 1)} - F_4 = 0.00000$$

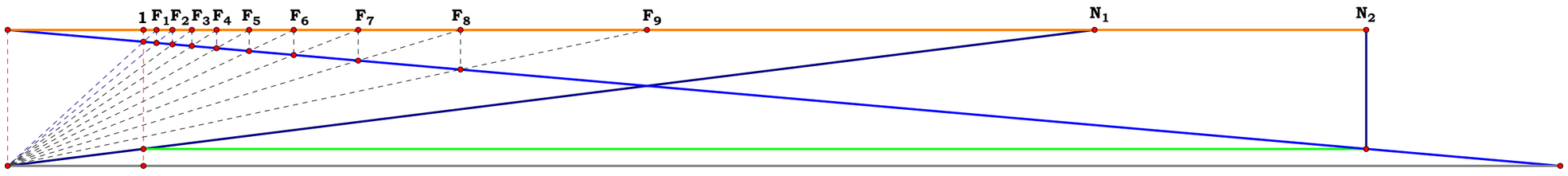
$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 5 \cdot (N_1 - 1)} - F_5 = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 6 \cdot (N_1 - 1)} - F_6 = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 7 \cdot (N_1 - 1)} - F_7 = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 8 \cdot (N_1 - 1)} - F_8 = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 9 \cdot (N_1 - 1)} - F_9 = 0.00000$$



$F_1 = 0.57143$
$F_2 = 0.66667$
$F_3 = 0.80000$
$F_4 = 1.00000$
$F_5 = 1.33333$
$F_6 = 2.00000$
$F_7 = 4.00000$

$\frac{N_1}{N_2} - F_1 = 0.00000$
$\frac{N_1}{N_2-1} - F_2 = 0.00000$
$\frac{N_1}{N_2-2} - F_3 = 0.00000$
$\frac{N_1}{N_2-3} - F_4 = 0.00000$
$\frac{N_1}{N_2-4} - F_5 = 0.00000$
$\frac{N_1}{N_2-5} - F_6 = 0.00000$
$\frac{N_1}{N_2-6} - F_7 = 0.00000$

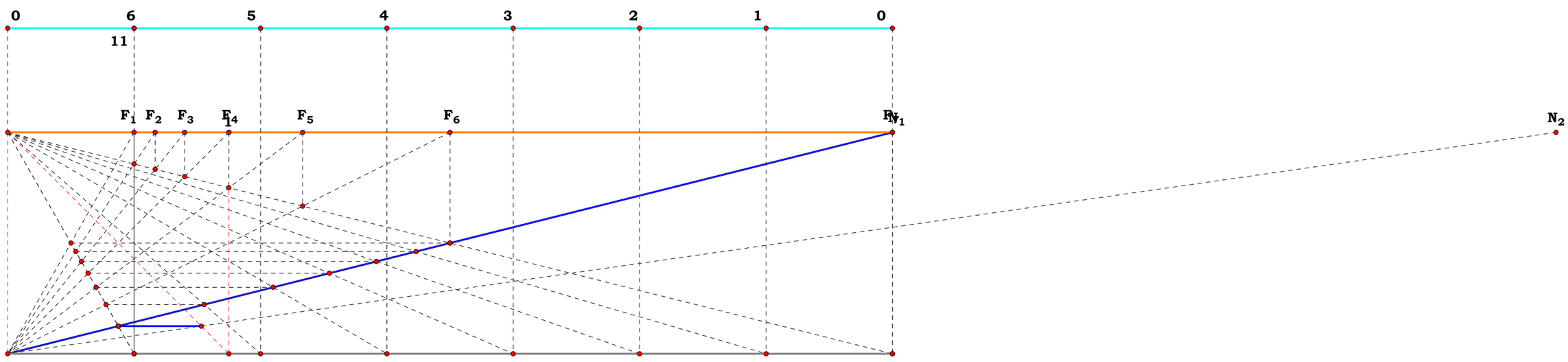
$N_1 = 4.00000$
$N_2 = 7.00000$

01 = 3.08724 cm
12 = 3.08724 cm
23 = 3.08724 cm
34 = 3.08724 cm
45 = 3.08724 cm
56 = 3.08724 cm

$\frac{01}{01} = 1.00000$
$\frac{12}{01} = 1.00000$
$\frac{23}{01} = 1.00000$
$\frac{34}{01} = 1.00000$
$\frac{45}{01} = 1.00000$
$\frac{56}{01} = 1.00000$

110 = 3.08724 cm

$\frac{110}{01} = 1.00000$



$(N_1+1)\cdot N_2 = 132.00000$

$N_1\cdot N_2 = 120.00000$

$N_1-N_2 = -2.00000$

$N_1 = 10.00000$

$N_2 = 12.00000$

$F_1 = 1.08197$

$F_2 = 1.17857$

$F_3 = 1.29412$

$F_4 = 1.43478$

$F_5 = 1.60976$

$F_6 = 1.83333$

$F_7 = 2.12903$

$F_8 = 2.53846$

$F_9 = 3.14286$

$F_{10} = 4.12500$

$F_{11} = 6.00000$

$$\frac{((N_1+1)\cdot N_2)}{(N_1\cdot N_2)-(N_1-N_2)}-F_1 = 0.00000$$

$$\frac{((N_1+1)\cdot N_2)}{(N_1\cdot N_2)-((N_1-N_2)+N_1)}-F_2 = 0.00000$$

$$\frac{((N_1+1)\cdot N_2)}{(N_1\cdot N_2)-((N_1-N_2)+2\cdot N_1)}-F_3 = 0.00000$$

$$\frac{((N_1+1)\cdot N_2)}{(N_1\cdot N_2)-((N_1-N_2)+3\cdot N_1)}-F_4 = 0.00000$$

$$\frac{((N_1+1)\cdot N_2)}{(N_1\cdot N_2)-((N_1-N_2)+4\cdot N_1)}-F_5 = 0.00000$$

$$\frac{((N_1+1)\cdot N_2)}{(N_1\cdot N_2)-((N_1-N_2)+5\cdot N_1)}-F_6 = 0.00000$$

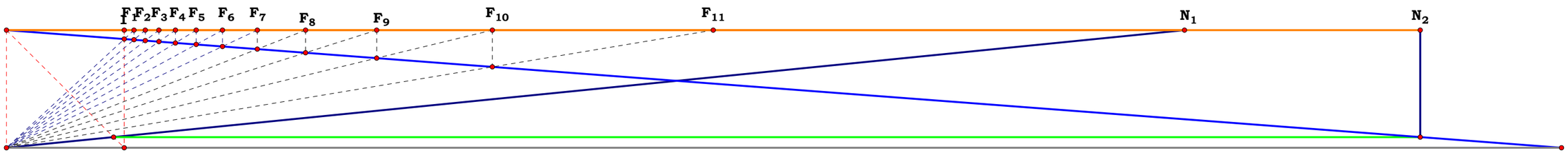
$$\frac{((N_1+1)\cdot N_2)}{(N_1\cdot N_2)-((N_1-N_2)+6\cdot N_1)}-F_7 = 0.00000$$

$$\frac{((N_1+1)\cdot N_2)}{(N_1\cdot N_2)-((N_1-N_2)+7\cdot N_1)}-F_8 = 0.00000$$

$$\frac{((N_1+1)\cdot N_2)}{(N_1\cdot N_2)-((N_1-N_2)+8\cdot N_1)}-F_9 = 0.00000$$

$$\frac{((N_1+1)\cdot N_2)}{(N_1\cdot N_2)-((N_1-N_2)+9\cdot N_1)}-F_{10} = 0.00000$$

$$\frac{((N_1+1)\cdot N_2)}{(N_1\cdot N_2)-((N_1-N_2)+10\cdot N_1)}-F_{11} = 0.00000$$



$N_1 = 5.00000$

$N_2 = 3.00000$

$N_1^2 \cdot N_2 = 75.00000$

$N_1 - 1 = 4.00000$

$F_1 = 1.05634$

$F_2 = 1.11940$

$F_3 = 1.19048$

$F_4 = 1.27119$

$F_5 = 1.36364$

$F_6 = 1.47059$

$F_7 = 1.59574$

$F_8 = 1.74419$

$F_9 = 1.92308$

$F_{10} = 2.14286$

$F_{11} = 2.41935$

$F_{12} = 2.77778$

$$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - (N_1 - 1)} - F_1 = 0.00000$$

$$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 2 \cdot (N_1 - 1)} - F_2 = 0.00000$$

$$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 3 \cdot (N_1 - 1)} - F_3 = 0.00000$$

$$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 4 \cdot (N_1 - 1)} - F_4 = 0.00000$$

$$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 5 \cdot (N_1 - 1)} - F_5 = 0.00000$$

$$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 6 \cdot (N_1 - 1)} - F_6 = 0.00000$$

$$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 7 \cdot (N_1 - 1)} - F_7 = 0.00000$$

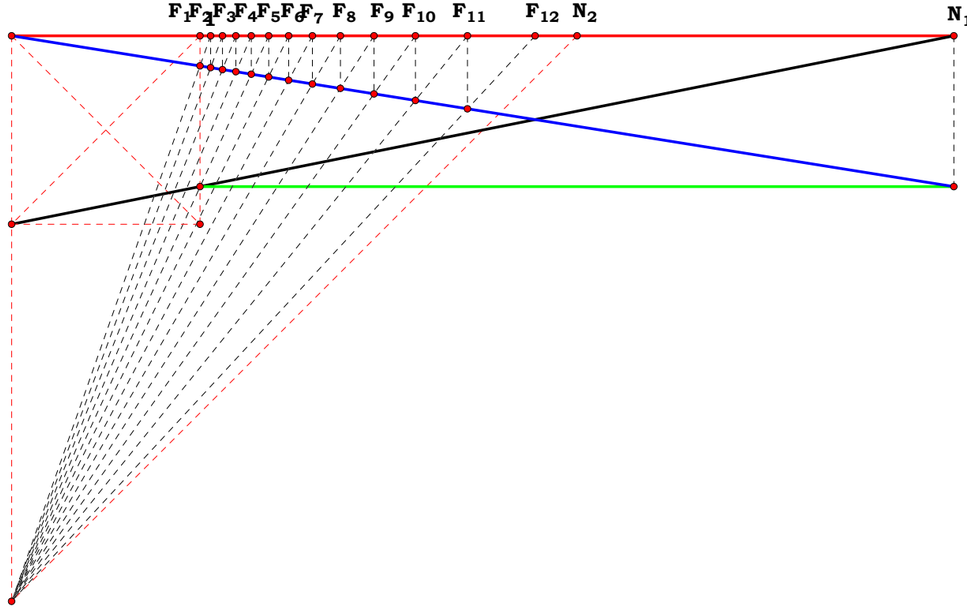
$$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 8 \cdot (N_1 - 1)} - F_8 = 0.00000$$

$$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 9 \cdot (N_1 - 1)} - F_9 = 0.00000$$

$$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 10 \cdot (N_1 - 1)} - F_{10} = 0.00000$$

$$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 11 \cdot (N_1 - 1)} - F_{11} = 0.00000$$

$$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 12 \cdot (N_1 - 1)} - F_{12} = 0.00000$$



$F_1 = 1.18762$
$F_2 = 1.25762$
$F_3 = 1.33639$
$F_4 = 1.42568$
$F_5 = 1.52777$
$F_6 = 1.64560$
$F_7 = 1.78312$
$F_8 = 1.94573$
$F_9 = 2.14097$
$F_{10} = 2.37976$

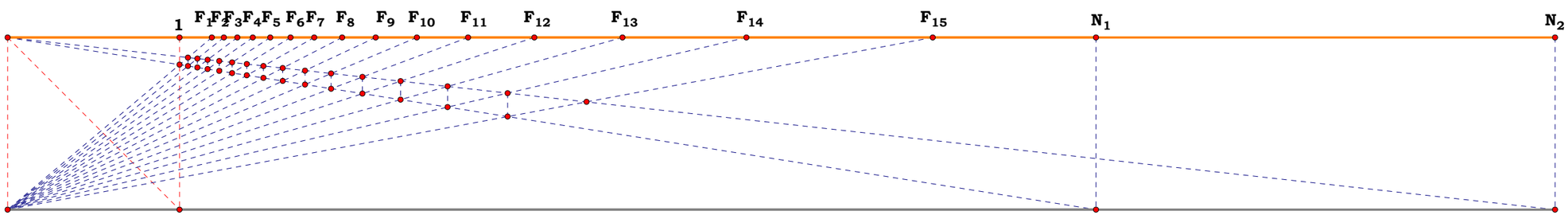
$N_1 = 6.32996$
$N_2 = 9.00000$

$N_1 \cdot N_2 = 56.96961$
$N_2 - N_1 = 2.67004$

$F_{11} = 2.67851$
$F_{12} = 3.06302$
$F_{13} = 3.57645$
$F_{14} = 4.29666$
$F_{15} = 5.38007$

$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - N_2 - 0 \cdot (N_2 - N_1)} - F_1 = 0.00000$
$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - N_2 - (N_2 - N_1)} - F_2 = 0.00000$
$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - N_2 - 2 \cdot (N_2 - N_1)} - F_3 = 0.00000$
$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - N_2 - 3 \cdot (N_2 - N_1)} - F_4 = 0.00000$
$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - N_2 - 4 \cdot (N_2 - N_1)} - F_5 = 0.00000$
$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - N_2 - 5 \cdot (N_2 - N_1)} - F_6 = 0.00000$
$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - N_2 - 6 \cdot (N_2 - N_1)} - F_7 = 0.00000$

$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - N_2 - 8 \cdot (N_2 - N_1)} - F_8 = 0.19524$
$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - N_2 - 9 \cdot (N_2 - N_1)} - F_{10} = 0.00000$
$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - N_2 - 10 \cdot (N_2 - N_1)} - F_{11} = 0.00000$
$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - N_2 - 11 \cdot (N_2 - N_1)} - F_{12} = 0.00000$
$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - N_2 - 12 \cdot (N_2 - N_1)} - F_{13} = 0.00000$
$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - N_2 - 13 \cdot (N_2 - N_1)} - F_{14} = 0.00000$
$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - N_2 - 14 \cdot (N_2 - N_1)} - F_{15} = 0.00000$



$N_1 = 6.00000$

$N_2 = 10.00000$

$N_1 \cdot N_2 = 60.00000$

$N_2 - N_1 = 4.00000$

$F_1 = 1.07143$

$F_2 = 1.15385$

$F_3 = 1.25000$

$F_4 = 1.36364$

$F_5 = 1.50000$

$F_6 = 1.66667$

$F_7 = 1.87500$

$F_8 = 2.14286$

$F_9 = 2.50000$

$F_{10} = 3.00000$

$F_{11} = 3.75000$

$F_{12} = 5.00000$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - (N_2 - N_1)} - F_1 = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 2 \cdot (N_2 - N_1)} - F_2 = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 3 \cdot (N_2 - N_1)} - F_3 = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 4 \cdot (N_2 - N_1)} - F_4 = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 5 \cdot (N_2 - N_1)} - F_5 = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 6 \cdot (N_2 - N_1)} - F_6 = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 7 \cdot (N_2 - N_1)} - F_7 = 0.00000$$

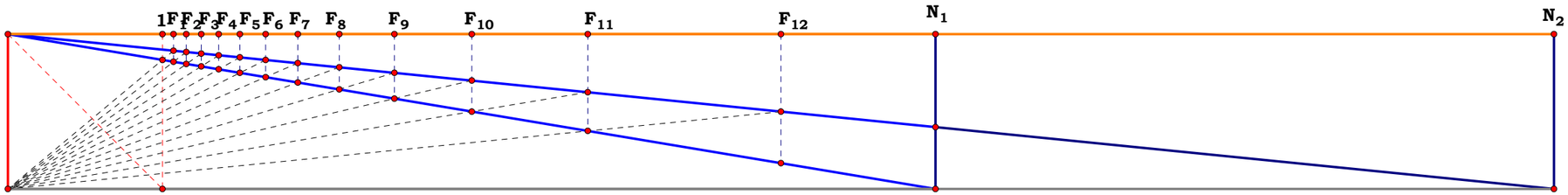
$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 8 \cdot (N_2 - N_1)} - F_8 = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 9 \cdot (N_2 - N_1)} - F_9 = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 10 \cdot (N_2 - N_1)} - F_{10} = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 11 \cdot (N_2 - N_1)} - F_{11} = 0.00000$$

$$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 12 \cdot (N_2 - N_1)} - F_{12} = 0.00000$$



$N_1 = 7.00000$

$N_2 = 2.00000$

$N_1 \cdot N_2 = 14.00000$

$F_1 = 1.07692$

$F_2 = 1.16667$

$F_3 = 1.27273$

$F_4 = 1.40000$

$F_5 = 1.55556$

$F_6 = 1.75000$

$F_7 = 2.00000$

$F_8 = 2.33333$

$F_9 = 2.80000$

$F_{10} = 3.50000$

$F_{11} = 4.66667$

$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)-1} - F_1 = 0.00000$

$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)-2} - F_2 = 0.00000$

$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)-3} - F_3 = 0.00000$

$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)-4} - F_4 = 0.00000$

$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)-5} - F_5 = 0.00000$

$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)-6} - F_6 = 0.00000$

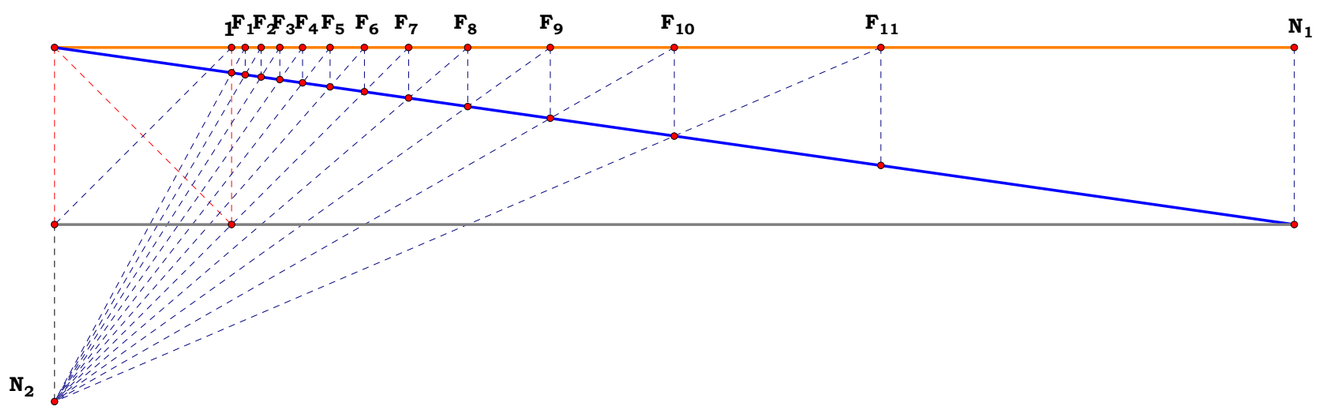
$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)-7} - F_7 = 0.00000$

$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)-8} - F_8 = 0.00000$

$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)-9} - F_9 = 0.00000$

$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)-10} - F_{10} = 0.00000$

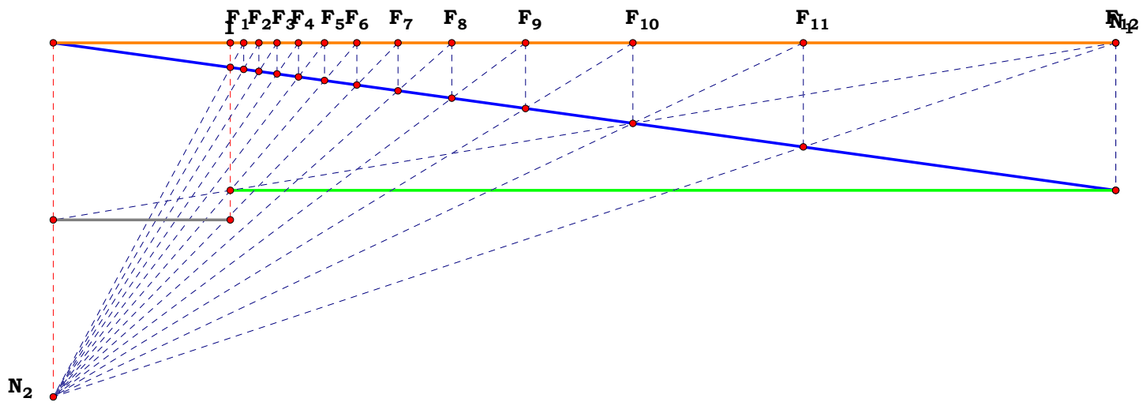
$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)-11} - F_{11} = 0.00000$



$F_1 = 1.07463$
$F_2 = 1.16129$
$F_3 = 1.26316$
$F_4 = 1.38462$
$F_5 = 1.53191$
$F_6 = 1.71429$
$F_7 = 1.94595$
$F_8 = 2.25000$
$F_9 = 2.66667$
$F_{10} = 3.27273$
$F_{11} = 4.23529$
$F_{12} = 6.00000$

$N_1 = 6.00000$
$N_2 = 2.00000$
$N_1^2 \cdot N_2 = 72.00000$
$N_1 - 1 = 5.00000$

$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - (N_1 - 1)} - F_1 = 0.00000$
$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 2 \cdot (N_1 - 1)} - F_2 = 0.00000$
$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 3 \cdot (N_1 - 1)} - F_3 = 0.00000$
$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 4 \cdot (N_1 - 1)} - F_4 = 0.00000$
$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 5 \cdot (N_1 - 1)} - F_5 = 0.00000$
$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 6 \cdot (N_1 - 1)} - F_6 = 0.00000$
$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 7 \cdot (N_1 - 1)} - F_7 = 0.00000$
$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 8 \cdot (N_1 - 1)} - F_8 = 0.00000$
$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 9 \cdot (N_1 - 1)} - F_9 = 0.00000$
$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 10 \cdot (N_1 - 1)} - F_{10} = 0.00000$
$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 11 \cdot (N_1 - 1)} - F_{11} = 0.00000$
$\frac{(N_1^2 \cdot N_2)}{(N_1^2 \cdot N_2) - 12 \cdot (N_1 - 1)} - F_{12} = 0.00000$



X1 X2 X3 X4 X5 X6 X7 X8 X9 X10 X11 X12 X13 X14 X15 X16 X17 X18 X19 X20

Y1 Y2 Y3 Y4 Y5 Y6 Y7 Y8 Y9 Y10 Y11 Y12 Y13 Y14 Y15 Y16 Y17 Y18 Y19 Y20

Circle

Show Lines

Points

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Hide Point N[1]

Hide Point N[2]

Show Base Line Points (20)

Hide Point N[3]

Hide Action Buttons

$N_1 = 10.00000$

$N_2 = 4.00000$

$N_3 = 3.00000$

$N_3\text{-}1 = 2.00000$

$N_1\cdot(N_3\text{-}1)+N_1 = 30.00000$

$N_2\cdot(N_3\text{-}1)+N_2 = 12.00000$

$F_1 = 2.50000$

$F_2 = 2.72727$

$F_3 = 3.00000$

$F_4 = 3.33333$

$F_5 = 3.75000$

$F_6 = 4.28571$

$F_7 = 5.00000$

$F_8 = 6.00000$

$F_9 = 7.50000$

$F_{10} = 10.00000$

$\frac{(N_1\cdot(N_3\text{-}1)+N_1)}{(N_2\cdot(N_3\text{-}1)+N_2)}\text{-}F_1 = 0.00000$

$\frac{(N_1\cdot(N_3\text{-}1)+N_1)}{(N_2\cdot(N_3\text{-}1)+N_2)\text{-}1}\text{-}F_2 = 0.00000$

$\frac{(N_1\cdot(N_3\text{-}1)+N_1)}{(N_2\cdot(N_3\text{-}1)+N_2)\text{-}2}\text{-}F_3 = 0.00000$

$\frac{(N_1\cdot(N_3\text{-}1)+N_1)}{(N_2\cdot(N_3\text{-}1)+N_2)\text{-}3}\text{-}F_4 = 0.00000$

$\frac{(N_1\cdot(N_3\text{-}1)+N_1)}{(N_2\cdot(N_3\text{-}1)+N_2)\text{-}4}\text{-}F_5 = 0.00000$

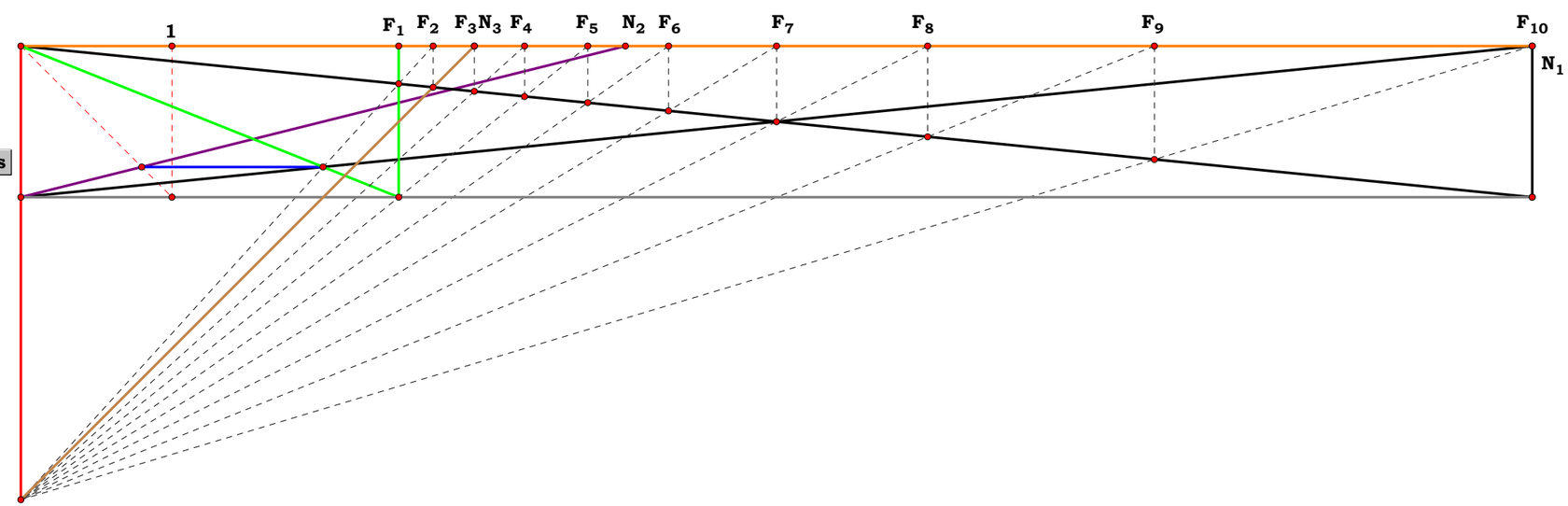
$\frac{(N_1\cdot(N_3\text{-}1)+N_1)}{(N_2\cdot(N_3\text{-}1)+N_2)\text{-}5}\text{-}F_6 = 0.00000$

$\frac{(N_1\cdot(N_3\text{-}1)+N_1)}{(N_2\cdot(N_3\text{-}1)+N_2)\text{-}6}\text{-}F_7 = 0.00000$

$\frac{(N_1\cdot(N_3\text{-}1)+N_1)}{(N_2\cdot(N_3\text{-}1)+N_2)\text{-}7}\text{-}F_8 = 0.00000$

$\frac{(N_1\cdot(N_3\text{-}1)+N_1)}{(N_2\cdot(N_3\text{-}1)+N_2)\text{-}8}\text{-}F_9 = 0.00000$

$\frac{(N_1\cdot(N_3\text{-}1)+N_1)}{(N_2\cdot(N_3\text{-}1)+N_2)\text{-}9}\text{-}F_{10} = 0.00000$



$F_1 = 1.09804$

$F_2 = 1.21739$

$F_3 = 1.36585$

$F_4 = 1.55556$

$F_5 = 1.80645$

$F_6 = 2.15385$

$F_7 = 2.66667$

$F_8 = 3.50000$

$F_9 = 5.09091$

$$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3)-((N_1-1)\cdot(N_2-N_3))} - F_1 = 0.00000$$

$$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3)-((N_1-1)\cdot(N_2-N_3))\cdot 2} - F_2 = 0.00000$$

$$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3)-((N_1-1)\cdot(N_2-N_3))\cdot 3} - F_3 = 0.00000$$

$$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3)-((N_1-1)\cdot(N_2-N_3))\cdot 4} - F_4 = 0.00000$$

$$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3)-((N_1-1)\cdot(N_2-N_3))\cdot 5} - F_5 = 0.00000$$

$$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3)-((N_1-1)\cdot(N_2-N_3))\cdot 6} - F_6 = 0.00000$$

$$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3)-((N_1-1)\cdot(N_2-N_3))\cdot 7} - F_7 = 0.00000$$

$$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3)-((N_1-1)\cdot(N_2-N_3))\cdot 8} - F_8 = 0.00000$$

$$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3)-((N_1-1)\cdot(N_2-N_3))\cdot 9} - F_9 = 0.00000$$

$N_1 = 6.00000$

$N_2 = 7.00000$

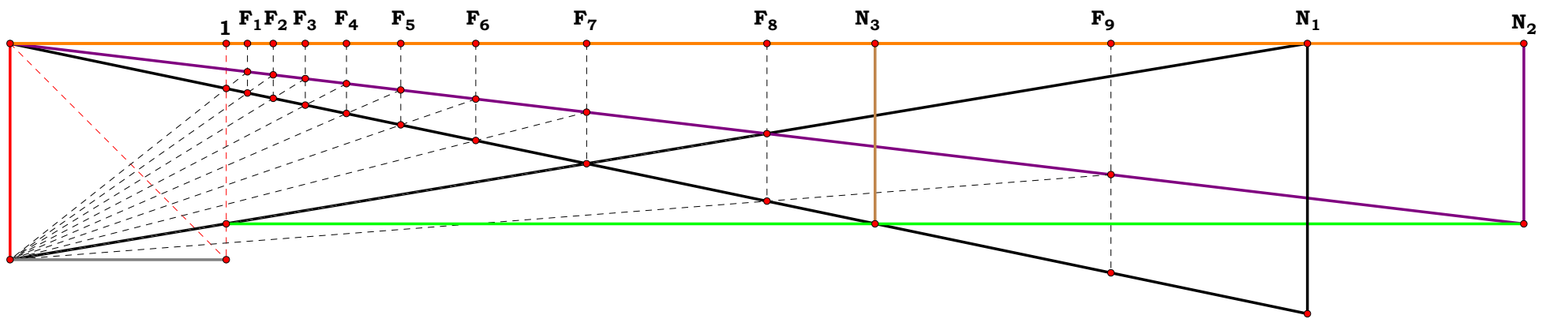
$N_3 = 4.00000$

$N_1 \cdot N_2 \cdot N_3 = 168.00000$

$N_1 - 1 = 5.00000$

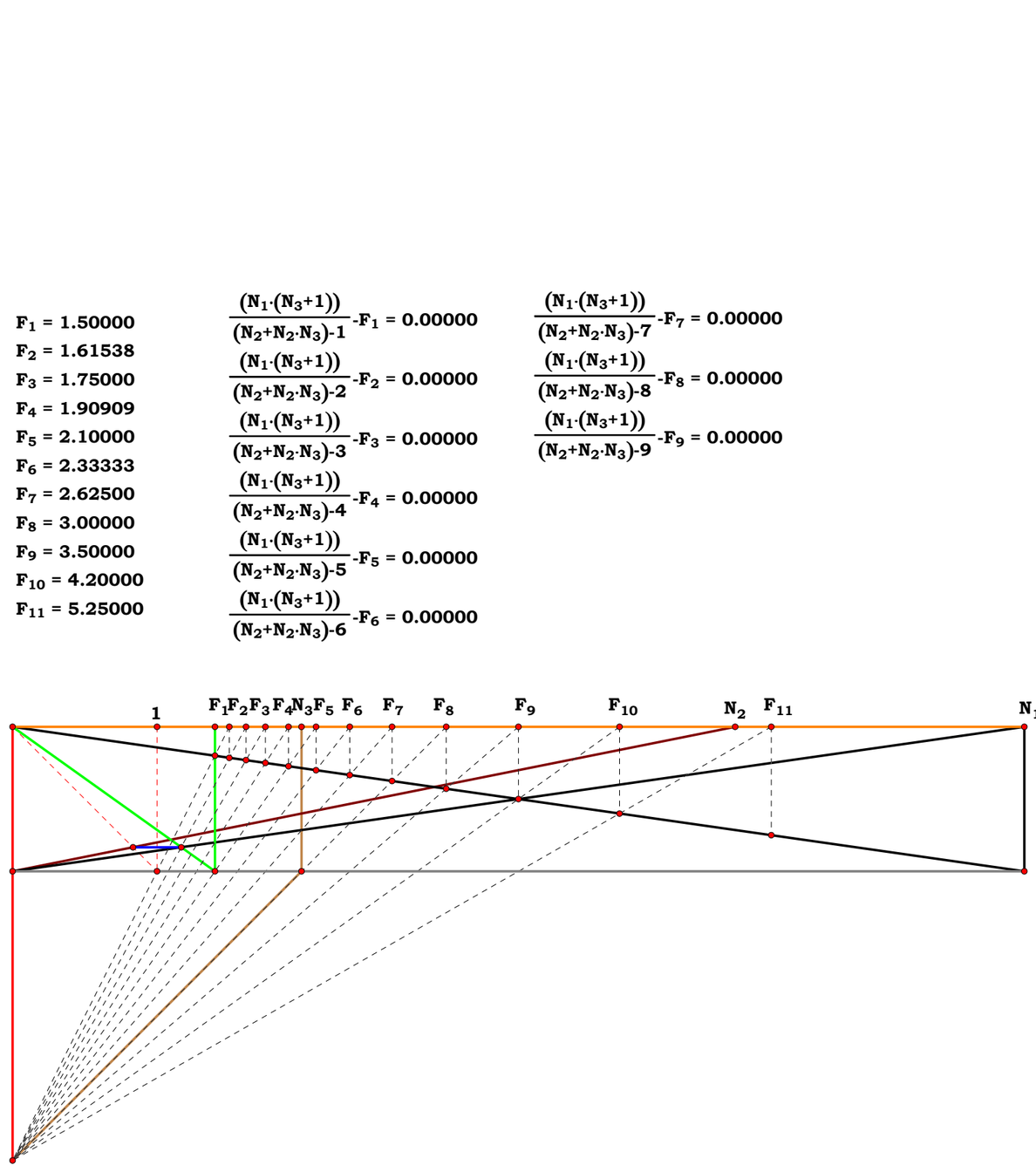
$N_2 - N_3 = 3.00000$

$(N_1-1)\cdot(N_2-N_3) = 15.00000$



$F_1 = 1.50000$
$F_2 = 1.61538$
$F_3 = 1.75000$
$F_4 = 1.90909$
$F_5 = 2.10000$
$F_6 = 2.33333$
$F_7 = 2.62500$
$F_8 = 3.00000$
$F_9 = 3.50000$
$F_{10} = 4.20000$
$F_{11} = 5.25000$

$\frac{(N_1\cdot(N_3+1))}{(N_2+N_2\cdot N_3)-1} - F_1 = 0.00000$
$\frac{(N_1\cdot(N_3+1))}{(N_2+N_2\cdot N_3)-2} - F_2 = 0.00000$
$\frac{(N_1\cdot(N_3+1))}{(N_2+N_2\cdot N_3)-3} - F_3 = 0.00000$
$\frac{(N_1\cdot(N_3+1))}{(N_2+N_2\cdot N_3)-4} - F_4 = 0.00000$
$\frac{(N_1\cdot(N_3+1))}{(N_2+N_2\cdot N_3)-5} - F_5 = 0.00000$
$\frac{(N_1\cdot(N_3+1))}{(N_2+N_2\cdot N_3)-6} - F_6 = 0.00000$
$\frac{(N_1\cdot(N_3+1))}{(N_2+N_2\cdot N_3)-7} - F_7 = 0.00000$
$\frac{(N_1\cdot(N_3+1))}{(N_2+N_2\cdot N_3)-8} - F_8 = 0.00000$
$\frac{(N_1\cdot(N_3+1))}{(N_2+N_2\cdot N_3)-9} - F_9 = 0.00000$



$N_1 = 7.00000$
$N_2 = 5.00000$
$N_3 = 2.00000$

$N_3+1 = 3.00000$
$N_1\cdot(N_3+1) = 21.00000$
$N_2+N_2\cdot N_3 = 15.00000$

$F_1 = 1.12676$

$F_2 = 1.29032$

$F_3 = 1.50943$

$F_4 = 1.81818$

$F_5 = 2.28571$

$F_6 = 3.07692$

$F_7 = 4.70588$

$$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3)-(N_1-1)} - F_1 = 0.00000$$

$$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3)-2 \cdot (N_1-1)} - F_2 = 0.00000$$

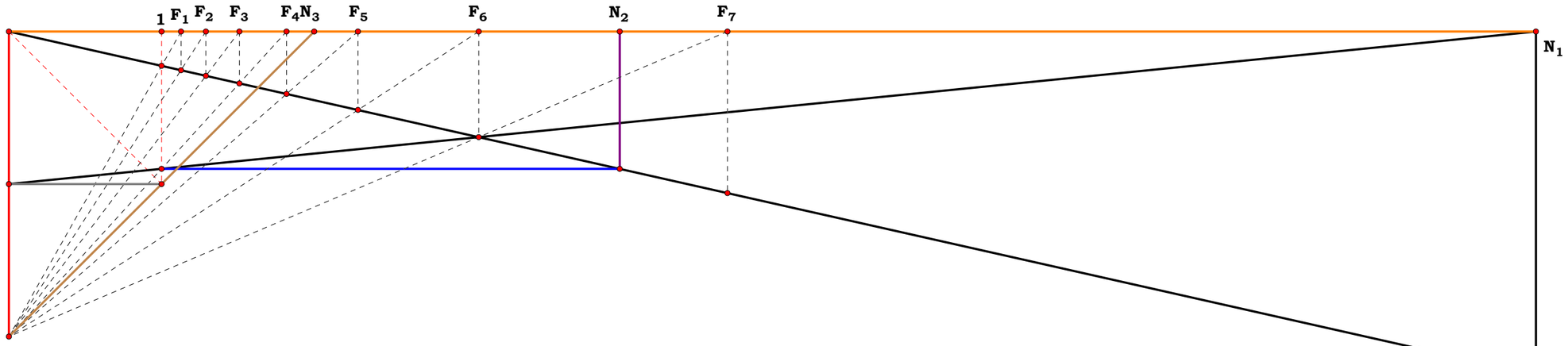
$$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3)-3 \cdot (N_1-1)} - F_3 = 0.00000$$

$$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3)-4 \cdot (N_1-1)} - F_4 = 0.00000$$

$$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3)-5 \cdot (N_1-1)} - F_5 = 0.00000$$

$$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3)-6 \cdot (N_1-1)} - F_6 = 0.00000$$

$$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3)-7 \cdot (N_1-1)} - F_7 = 0.00000$$



$N_1 = 10.00000$

$N_2 = 4.00000$

$N_3 = 2.00000$

$N_1 \cdot N_2 \cdot N_3 = 80.00000$

$N_1 - 1 = 9.00000$

X1 X2 X3 X4 X5 X6 X7 X8 X9 X10 X11 X12 X13 X14 X15 X16 X17 X18 X19 X20

Y1 Y2 Y3 Y4 Y5 Y6 Y7 Y8 Y9 Y10 Y11 Y12 Y13 Y14 Y15 Y16 Y17 Y18 Y19 Y20

Circle

Show Lines

Points

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Hide Point N[1]

Hide Point N[2]

Show Base Line Points (20)

$N_1 = 5.00000$

$N_2 = 8.00000$

$N_3 = 4.00000$

$N_1 \cdot N_2 \cdot N_3 = 160.00000$

$F_1 = 0.95238$

$F_2 = 1.08108$

$F_3 = 1.25000$

$F_4 = 1.48148$

$F_5 = 1.81818$

$F_6 = 2.35294$

$F_7 = 3.33333$

$\frac{(N_1 \cdot N_2 \cdot N_3)}{91} = 1.75824$

$\frac{(N_1 \cdot N_2 \cdot N_3)}{85} = 1.88235$

$\frac{(N_1 \cdot N_2 \cdot N_3)}{79} = 2.02532$

$\frac{(N_1 \cdot N_2 \cdot N_3)}{73} = 2.19178$

$\frac{(N_1 \cdot N_2 \cdot N_3)}{67} = 2.38806$

3·7·5 = 105.00000

(3·7·5)-7-7 = 91.00000

(3·7·5)-7-7-3-3 = 85.00000

(3·7·5)-7-7-3-3-3-3 = 79.00000

(3·7·5)-7-7-3-3-3-3-3-3 = 73.00000

(3·7·5)-7-7-3-3-3-3-3-3-3-3 = 67.00000

3·7·4 = 84.00000

$\frac{(N_1 \cdot N_2 \cdot N_3)}{77} = 2.07792$

$\frac{(N_1 \cdot N_2 \cdot N_3)}{68} = 2.35294$

$\frac{(N_1 \cdot N_2 \cdot N_3)}{59} = 2.71186$

$\frac{(N_1 \cdot N_2 \cdot N_3)}{50} = 3.20000$

$\frac{(N_1 \cdot N_2 \cdot N_3)}{32} = 5.00000$

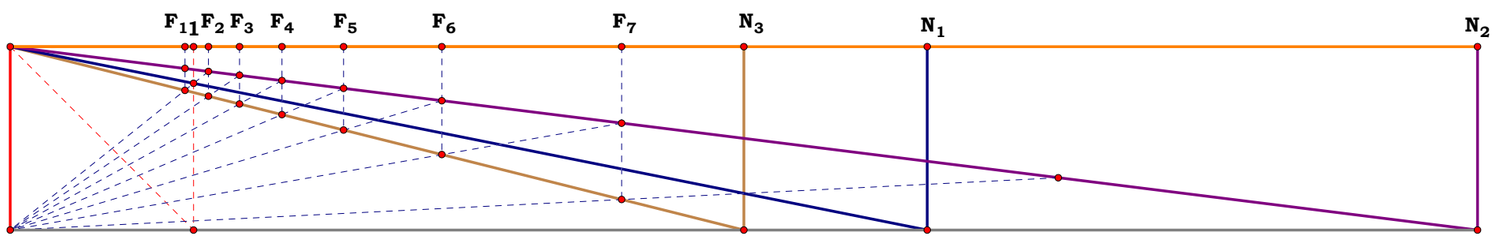
(3·7·4)-7 = 77.00000

(3·7·4)-2·7-2 = 68.00000

(3·7·4)-3·7-2-2 = 59.00000

(3·7·4)-4·7-2-2-2 = 50.00000

(3·7·4)-5·7-7-2-2-2-2-2 = 32.00000



X1 X2 X3 X4 X5 X6 X7 X8 X9 X10 X11 X12 X13 X14 X15 X16 X17 X18 X19 X20

Y1 Y2 Y3 Y4 Y5 Y6 Y7 Y8 Y9 Y10 Y11 Y12 Y13 Y14 Y15 Y16 Y17 Y18 Y19 Y20

Circle

Show Lines

Points

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Hide Point N[1]

Hide Point N[2]

Show Base Line Points (20)

$N_1 = 3.00000$

$N_2 = 5.00000$

$N_3 = 7.00000$

$3 \cdot 5 \cdot 7 = 105.00000$

$F_1 = 1.50000$ $\quad \frac{105}{70} = 1.50000$

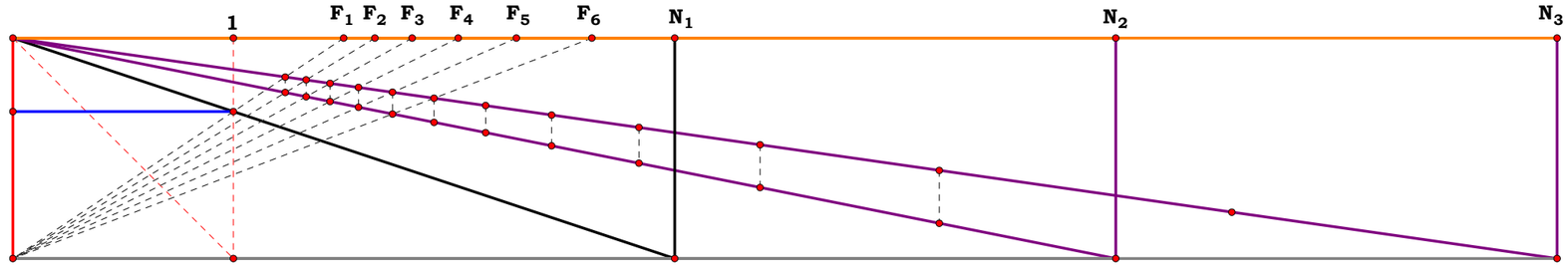
$F_2 = 1.64062$

$F_3 = 1.81034$ $\quad \frac{105}{64} = 1.64063$

$F_4 = 2.01923$

$F_5 = 2.28261$ $\quad \frac{105}{58} = 1.81034$

$F_6 = 2.62500$



X1 X2 X3 X4 X5 X6 X7 X8 X9 X10 X11 X12 X13 X14 X15 X16 X17 X18 X19 X20

Y1 Y2 Y3 Y4 Y5 Y6 Y7 Y8 Y9 Y10 Y11 Y12 Y13 Y14 Y15 Y16 Y17 Y18 Y19 Y20

Circle

Show Lines

Points

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Hide Point N[1]

Hide Point N[2]

Show Base Line Points (20)

N_1 = 9.00000

N_2 = 4.00000

N_3 = 7.00000

F_1 = 1.12000

F_2 = 1.27273

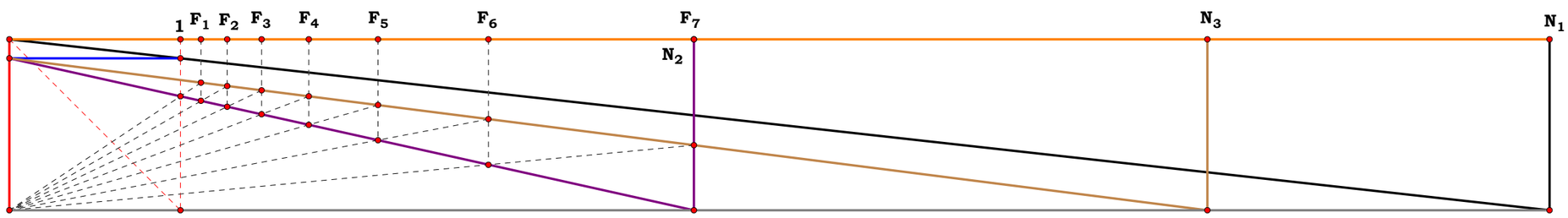
F_3 = 1.47368

F_4 = 1.75000

F_5 = 2.15385

F_6 = 2.80000

F_7 = 4.00000



X1 X2 X3 X4 X5 X6 X7 X8 X9 X10 X11 X12 X13 X14 X15 X16 X17 X18 X19 X20

Y1 Y2 Y3 Y4 Y5 Y6 Y7 Y8 Y9 Y10 Y11 Y12 Y13 Y14 Y15 Y16 Y17 Y18 Y19 Y20

Circle
Show Lines
Points
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Hide Point N[1]
Hide Point N[2]
Show Base Line Points (20)

$N_1 = 10.00000$

$N_2 = 5.00000$

$N_3 = 6.00000$

$N_1 \cdot N_3 = 60.00000$

$F_1 = 1.09091$

$F_2 = 1.20000$

$F_3 = 1.33333$

$F_4 = 1.50000$

$F_5 = 1.71429$

$F_6 = 2.00000$

$F_7 = 2.40000$

$F_8 = 3.00000$

$F_9 = 4.00000$

$F_{10} = 6.00000$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - N_2} - F_1 = 0.00000$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - N_2 \cdot 2} - F_2 = 0.00000$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - N_2 \cdot 3} - F_3 = 0.00000$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - N_2 \cdot 4} - F_4 = 0.00000$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - N_2 \cdot 5} - F_5 = 0.00000$

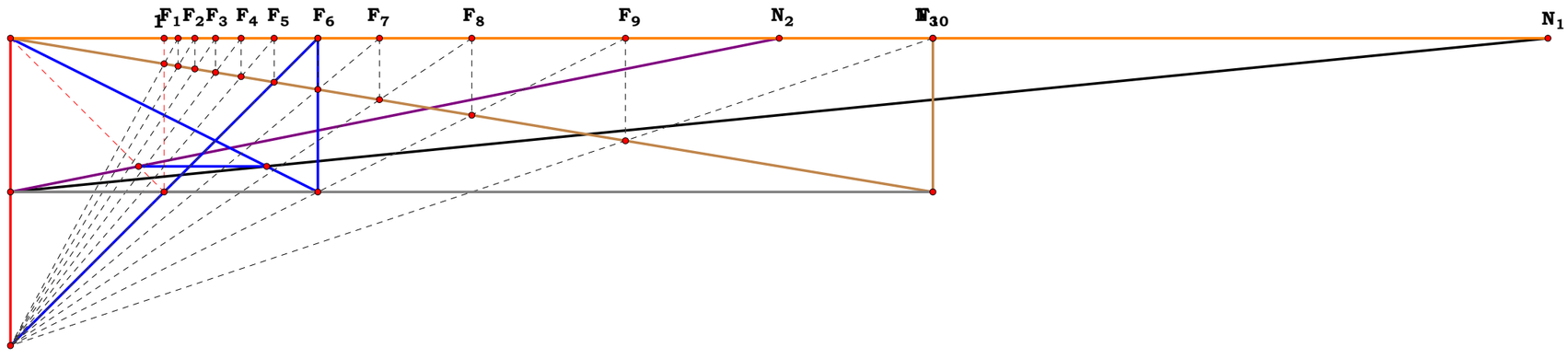
$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - N_2 \cdot 6} - F_6 = 0.00000$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - N_2 \cdot 7} - F_7 = 0.00000$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - N_2 \cdot 8} - F_8 = 0.00000$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - N_2 \cdot 9} - F_9 = 0.00000$

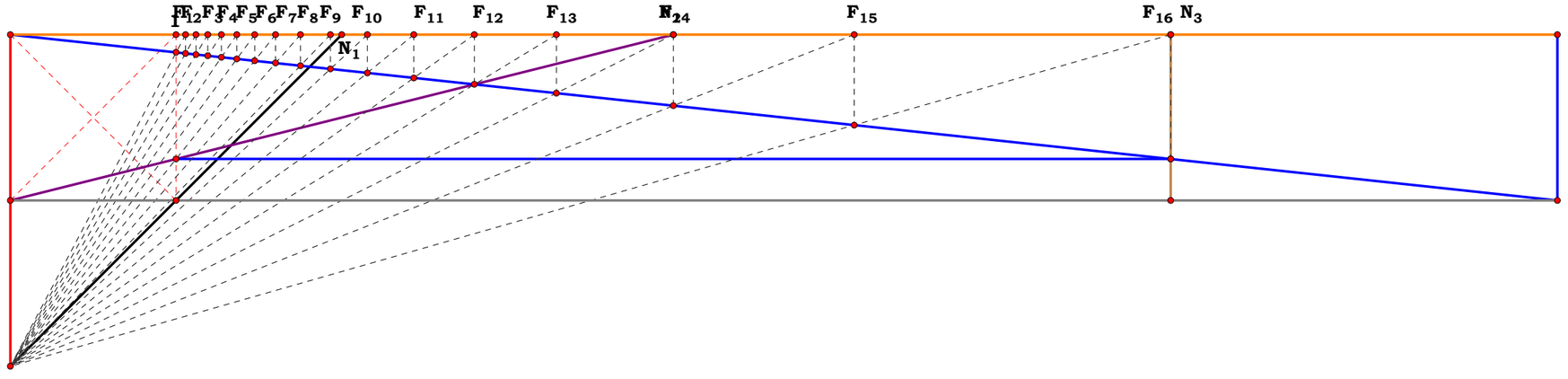
$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - N_2 \cdot 10} - F_{10} = 0.00000$



$F_1 = 1.05660$
$F_2 = 1.12000$
$F_3 = 1.19149$
$F_4 = 1.27273$
$F_5 = 1.36585$
$F_6 = 1.47368$
$F_7 = 1.60000$
$F_8 = 1.75000$
$F_9 = 1.93103$
$F_{10} = 2.15385$
$F_{11} = 2.43478$
$F_{12} = 2.80000$
$F_{13} = 3.29412$
$F_{14} = 4.00000$
$F_{15} = 5.09091$
$F_{16} = 7.00000$

$N_1 = 2.00000$
$N_2 = 4.00000$
$N_3 = 7.00000$
$N_1 \cdot N_2 \cdot N_3 = 56.00000$
$N_2 - 1 = 3.00000$

$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3) - (N_2 - 1)} - F_1 = 0.00000$
$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3) - (N_2 - 1) \cdot 2} - F_2 = 0.00000$
$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3) - (N_2 - 1) \cdot 3} - F_3 = 0.00000$
$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3) - (N_2 - 1) \cdot 4} - F_4 = 0.00000$
$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3) - (N_2 - 1) \cdot 5} - F_5 = 0.00000$
$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3) - (N_2 - 1) \cdot 6} - F_6 = 0.00000$
$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3) - (N_2 - 1) \cdot 7} - F_7 = 0.00000$
$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3) - (N_2 - 1) \cdot 8} - F_8 = 0.00000$
$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3) - (N_2 - 1) \cdot 9} - F_9 = 0.00000$
$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3) - (N_2 - 1) \cdot 10} - F_{10} = 0.00000$
$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3) - (N_2 - 1) \cdot 11} - F_{11} = 0.00000$
$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3) - (N_2 - 1) \cdot 12} - F_{12} = 0.00000$
$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3) - (N_2 - 1) \cdot 13} - F_{13} = 0.00000$
$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3) - (N_2 - 1) \cdot 14} - F_{14} = 0.00000$
$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3) - (N_2 - 1) \cdot 15} - F_{15} = 0.00000$
$\frac{(N_1 \cdot N_2 \cdot N_3)}{(N_1 \cdot N_2 \cdot N_3) - (N_2 - 1) \cdot 16} - F_{16} = 0.00000$



$F_1 = 1.07888$
$F_2 = 1.17126$
$F_3 = 1.28095$
$F_4 = 1.41330$
$F_5 = 1.57616$
$F_6 = 1.78144$
$F_7 = 2.04820$
$F_8 = 2.40892$
$F_9 = 2.92385$
$F_{10} = 3.71879$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - N_2} - F_1 = 0.00000$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - 2 \cdot N_2} - F_2 = 0.00000$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - 3 \cdot N_2} - F_3 = 0.00000$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - 4 \cdot N_2} - F_4 = 0.00000$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - 5 \cdot N_2} - F_5 = 0.00000$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - 6 \cdot N_2} - F_6 = 0.00000$

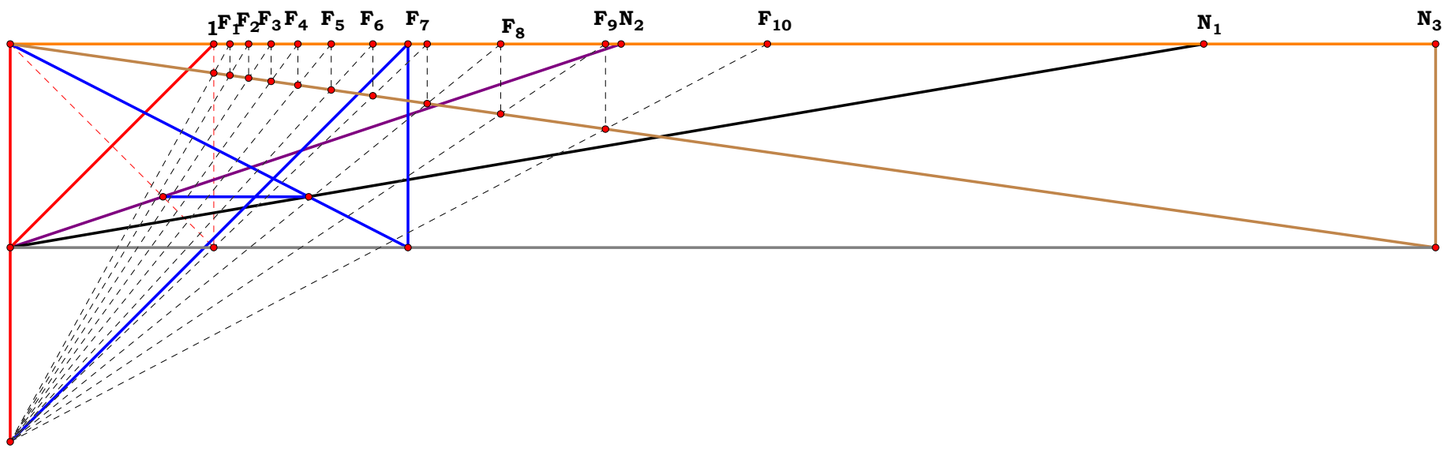
$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - 7 \cdot N_2} - F_8 = -0.36072$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - 8 \cdot N_2} - F_7 = 0.36072$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - 9 \cdot N_2} - F_9 = 0.00000$

$\frac{(N_1 \cdot N_3)}{(N_1 \cdot N_3) - 10 \cdot N_2} - F_{10} = 0.00000$

$N_1 = 5.86205$
$N_2 = 3.00000$
$N_3 = 7.00000$
$N_1 \cdot N_3 = 41.03433$



$F_1 = 1.09589$

$F_2 = 1.21212$

$F_3 = 1.35593$

$F_4 = 1.53846$

$F_5 = 1.77778$

$F_6 = 2.10526$

$F_7 = 2.58065$

$F_8 = 3.33333$

$F_9 = 4.70588$

$$\frac{(N_1 \cdot N_3 \cdot N_4)}{(N_1 \cdot N_3 \cdot N_4)+(N_2 - N_2 \cdot N_3)} - F_1 = 0.00000$$

$$\frac{(N_1 \cdot N_3 \cdot N_4)}{(N_1 \cdot N_3 \cdot N_4)+2 \cdot (N_2 - N_2 \cdot N_3)} - F_2 = 0.00000$$

$$\frac{(N_1 \cdot N_3 \cdot N_4)}{(N_1 \cdot N_3 \cdot N_4)+3 \cdot (N_2 - N_2 \cdot N_3)} - F_3 = 0.00000$$

$$\frac{(N_1 \cdot N_3 \cdot N_4)}{(N_1 \cdot N_3 \cdot N_4)+4 \cdot (N_2 - N_2 \cdot N_3)} - F_4 = 0.00000$$

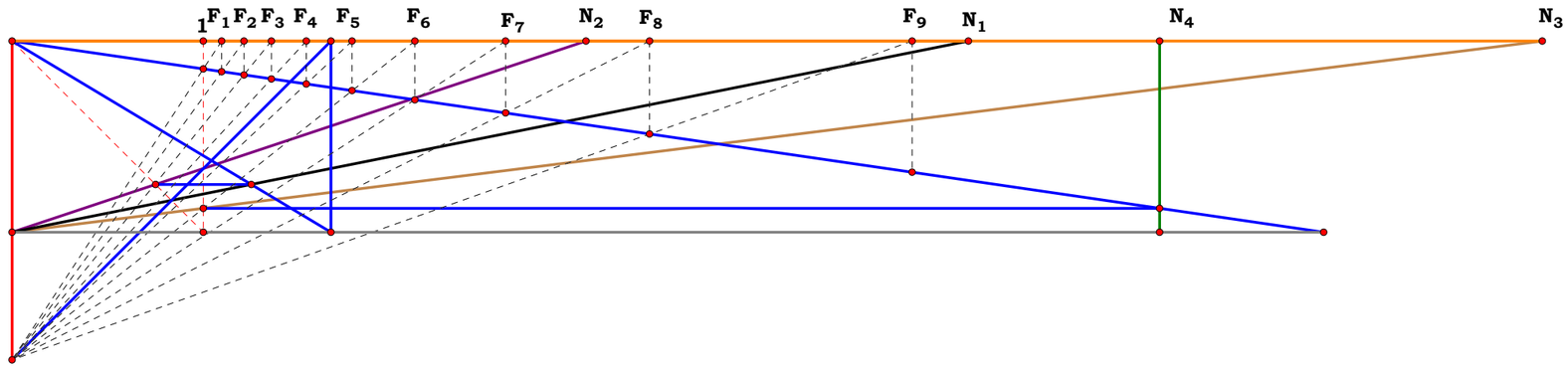
$$\frac{(N_1 \cdot N_3 \cdot N_4)}{(N_1 \cdot N_3 \cdot N_4)+5 \cdot (N_2 - N_2 \cdot N_3)} - F_5 = 0.00000$$

$$\frac{(N_1 \cdot N_3 \cdot N_4)}{(N_1 \cdot N_3 \cdot N_4)+6 \cdot (N_2 - N_2 \cdot N_3)} - F_6 = 0.00000$$

$$\frac{(N_1 \cdot N_3 \cdot N_4)}{(N_1 \cdot N_3 \cdot N_4)+7 \cdot (N_2 - N_2 \cdot N_3)} - F_7 = 0.00000$$

$$\frac{(N_1 \cdot N_3 \cdot N_4)}{(N_1 \cdot N_3 \cdot N_4)+8 \cdot (N_2 - N_2 \cdot N_3)} - F_8 = 0.00000$$

$$\frac{(N_1 \cdot N_3 \cdot N_4)}{(N_1 \cdot N_3 \cdot N_4)+9 \cdot (N_2 - N_2 \cdot N_3)} - F_9 = 0.00000$$



$N_1 = 5.00000$

$N_2 = 3.00000$

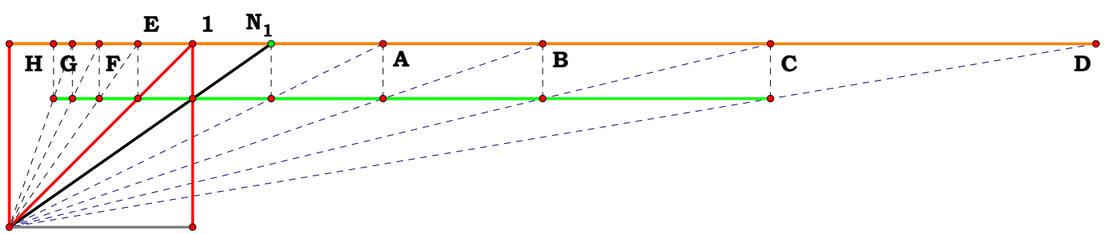
$N_3 = 8.00000$

$N_4 = 6.00000$

$N_1 \cdot N_3 \cdot N_4 = 240.00000$

$N_2 - N_2 \cdot N_3 = -21.00000$

N_1 = 1.42736



A = 2.03735

B = 2.90803

C = 4.15079

D = 5.92467

E = 0.70060

F = 0.49083

G = 0.34388

H = 0.24092

N_1^2-A = 0.00000

N_1^3-B = 0.00000

N_1^4-C = 0.00000

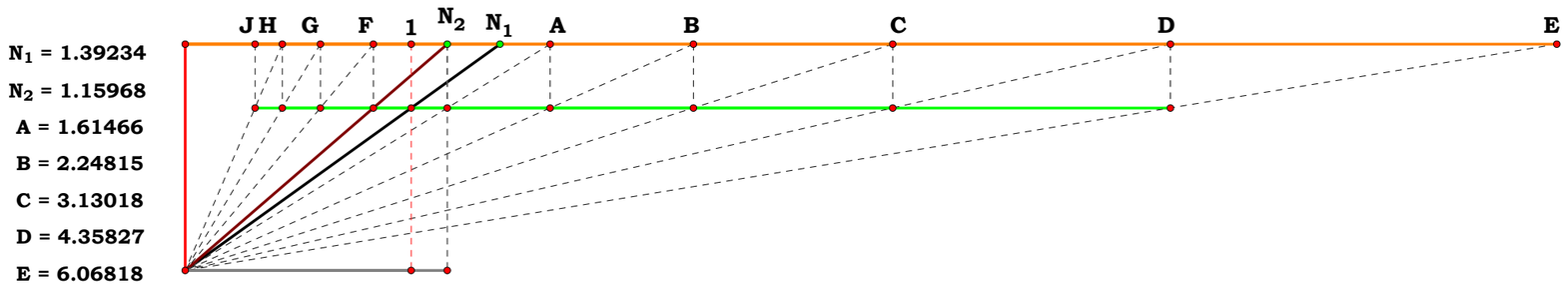
N_1^5-D = 0.00000

N_1^{-1}-E = 0.00000

N_1^{-2}-F = 0.00000

N_1^{-3}-G = 0.00000

N_1^{-4}-H = 0.00000



N_1 = 1.39234

N_2 = 1.15968

A = 1.61466

B = 2.24815

C = 3.13018

D = 4.35827

E = 6.06818

F = 0.83290

G = 0.59820

H = 0.42964

J = 0.30857

$N_2 \cdot N_1^{1}$-A = 0.00000

$N_2 \cdot N_1^{2}$-B = 0.00000

$N_2 \cdot N_1^{3}$-C = 0.00000

$N_2 \cdot N_1^{4}$-D = 0.00000

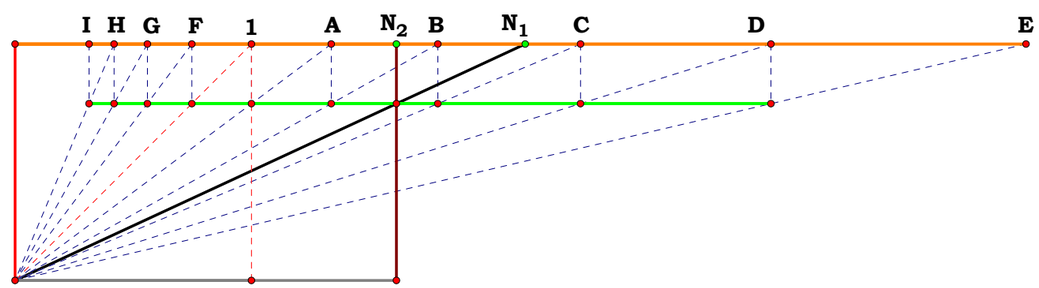
$N_2 \cdot N_1^{5}$-E = 0.00000

$N_2 \cdot N_1^{-1}$-F = 0.00000

$N_2 \cdot N_1^{-2}$-G = 0.00000

$N_2 \cdot N_1^{-3}$-H = 0.00000

$N_2 \cdot N_1^{-4}$-J = 0.00000



$N_1 = 2.15726$

$N_2 = 1.61326$

$\frac{N_1}{N_2} = 1.33720$

A = 1.33720

B = 1.78811

C = 2.39107

D = 3.19734

E = 4.27549

F = 0.74783

G = 0.55925

H = 0.41822

I = 0.31276

$\frac{N_1^{\,1}}{N_2}$ -A = 0.00000

$\frac{N_1^{\,2}}{N_2}$ -B = 0.00000

$\frac{N_1^{\,3}}{N_2}$ -C = 0.00000

$\frac{N_1^{\,4}}{N_2}$ -D = 0.00000

$\frac{N_1^{\,5}}{N_2}$ -E = 0.00000

$\frac{N_1^{\,-1}}{N_2}$ -F = 0.00000

$\frac{N_1^{\,-2}}{N_2}$ -G = 0.00000

$\frac{N_1^{\,-3}}{N_2}$ -H = 0.00000

$\frac{N_1^{\,-4}}{N_2}$ -I = 0.00000

Plate 3

$\frac{N_1}{N_2}$-A = 0.00000

$\frac{N_1^{\,2}}{N_2^{\,2}}$-B = 0.00000

$\frac{N_1^{\,3}}{N_2^{\,3}}$-C = 0.00000

$\frac{N_1^{\,4}}{N_2^{\,4}}$-D = 0.00000

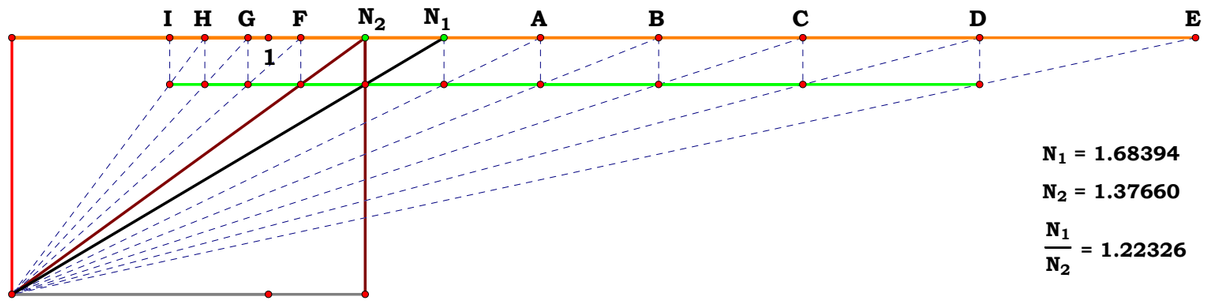
$\frac{N_1^{\,5}}{N_2^{\,5}}$-E = 0.00000

$\frac{N_2^{\,4}}{N_1^{\,4}}$-I = 0.00000

$\frac{N_2^{\,3}}{N_1^{\,3}}$-H = 0.00000

$\frac{N_2^{\,2}}{N_1^{\,2}}$-G = 0.00000

$\frac{N_2}{N_1}$-F = 0.00000



$N_1 = 1.68394$

$N_2 = 1.37660$

$\frac{N_1}{N_2} = 1.22326$

$A = 2.05989$

$B = 2.51977$

$C = 3.08233$

$D = 3.77048$

$E = 4.61226$

$F = 1.12536$

$G = 0.91997$

$H = 0.75207$

$I = 0.61481$

$N_1 \cdot \frac{N_1}{N_2}^{1} - A = 0.00000$

$N_1 \cdot \frac{N_1}{N_2}^{2} - B = 0.00000$

$N_1 \cdot \frac{N_1}{N_2}^{3} - C = 0.00000$

$N_1 \cdot \frac{N_1}{N_2}^{4} - D = 0.00000$

$N_1 \cdot \frac{N_1}{N_2}^{5} - E = 0.00000$

$N_1 \cdot \frac{N_1}{N_2}^{-1} - N_2 = 0.00000$

$N_1 \cdot \frac{N_1}{N_2}^{-2} - F = 0.00000$

$N_1 \cdot \frac{N_1}{N_2}^{-3} - G = 0.00000$

$N_1 \cdot \frac{N_1}{N_2}^{-4} - H = 0.00000$

$N_1 \cdot \frac{N_1}{N_2}^{-5} - I = 0.00000$

$\frac{N_1^{2}}{N_2} - A = 0.00000$

$\frac{N_1^{3}}{N_2^{2}} - B = 0.00000$

$\frac{N_1^{4}}{N_2^{3}} - C = 0.00000$

$\frac{N_1^{5}}{N_2^{4}} - D = 0.00000$

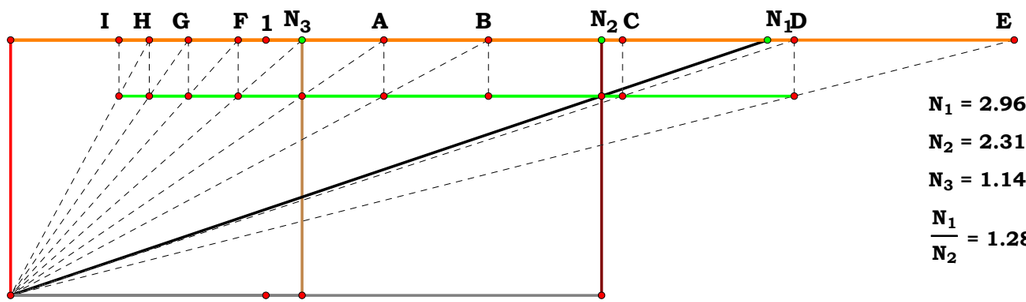
$\frac{N_1^{6}}{N_2^{5}} - E = 0.00000$

$\frac{N_2^{5}}{N_1^{4}} - I = 0.00000$

$\frac{N_2^{4}}{N_1^{3}} - H = 0.00000$

$\frac{N_2^{3}}{N_1^{2}} - G = 0.00000$

$\frac{N_2^{2}}{N_1} - F = 0.00000$



$N_1 = 2.96382$

$N_2 = 2.31441$

$N_3 = 1.14115$

$\frac{N_1}{N_2} = 1.28059$

$A = 1.46135$

$B = 1.87140$

$C = 2.39649$

$D = 3.06893$

$E = 3.93005$

$F = 0.89111$

$G = 0.69586$

$H = 0.54339$

$I = 0.42433$

$N_3 \cdot \frac{N_1^{\,1}}{N_2} - A = 0.00000$

$N_3 \cdot \frac{N_1^{\,2}}{N_2} - B = 0.00000$

$N_3 \cdot \frac{N_1^{\,3}}{N_2} - C = 0.00000$

$N_3 \cdot \frac{N_1^{\,4}}{N_2} - D = 0.00000$

$N_3 \cdot \frac{N_1^{\,5}}{N_2} - E = 0.00000$

$N_3 \cdot \frac{N_1^{\,-1}}{N_2} - F = 0.00000$

$N_3 \cdot \frac{N_1^{\,-2}}{N_2} - G = 0.00000$

$N_3 \cdot \frac{N_1^{\,-3}}{N_2} - H = 0.00000$

$N_3 \cdot \frac{N_1^{\,-4}}{N_2} - I = 0.00000$

Plate 5

$\frac{N_1 \cdot N_3}{N_2} - A = 0.00000$

$\frac{N_1^{\,2} \cdot N_3}{N_2^{\,2}} - B = 0.00000$

$\frac{N_1^{\,3} \cdot N_3}{N_2^{\,3}} - C = 0.00000$

$\frac{N_1^{\,4} \cdot N_3}{N_2^{\,4}} - D = 0.00000$

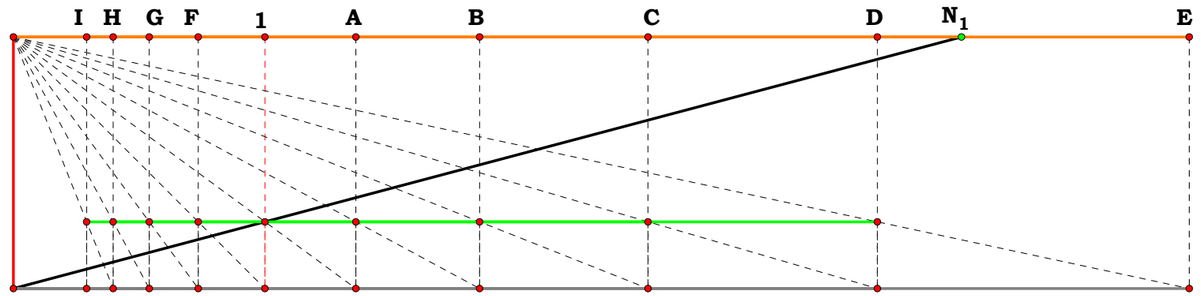
$\frac{N_1^{\,5} \cdot N_3}{N_2^{\,5}} - E = 0.00000$

$\frac{N_2^{\,4} \cdot N_3}{N_1^{\,4}} - I = 0.00000$

$\frac{N_2^{\,3} \cdot N_3}{N_1^{\,3}} - H = 0.00000$

$\frac{N_2^{\,2} \cdot N_3}{N_1^{\,2}} - G = 0.00000$

$\frac{N_2 \cdot N_3}{N_1} - F = 0.00000$



$N_1 = 3.76827$

$\frac{N_1}{N_1-1} = 1.36124$

$A = 1.36124$

$B = 1.85297$

$C = 2.52232$

$D = 3.43348$

$E = 4.67378$

$F = 0.73463$

$G = 0.53968$

$H = 0.39646$

$I = 0.29125$

$\frac{N_1^{\ 1}}{N_1-1}$ -A = 0.00000

$\frac{N_1^{\ 2}}{N_1-1}$ -B = 0.00000

$\frac{N_1^{\ 3}}{N_1-1}$ -C = 0.00000

$\frac{N_1^{\ 4}}{N_1-1}$ -D = 0.00000

$\frac{N_1^{\ 5}}{N_1-1}$ -E = 0.00000

$\frac{N_1^{\ -1}}{N_1-1}$ -F = 0.00000

$\frac{N_1^{\ -2}}{N_1-1}$ -G = 0.00000

$\frac{N_1^{\ -3}}{N_1-1}$ -H = 0.00000

$\frac{N_1^{\ -4}}{N_1-1}$ -I = 0.00000

$\frac{N_1}{N_1-1}$-A = 0.00000

$\frac{N_1^2}{(N_1^2-2\cdot N_1)+1}$-B = 0.00000

$\frac{N_1^3}{((N_1^3-3\cdot N_1^2)+3\cdot N_1)-1}$-C = 0.00000

$\frac{N_1^4}{(((N_1^4-4\cdot N_1^3)+6\cdot N_1^2)-4\cdot N_1)+1}$-D = 0.00000

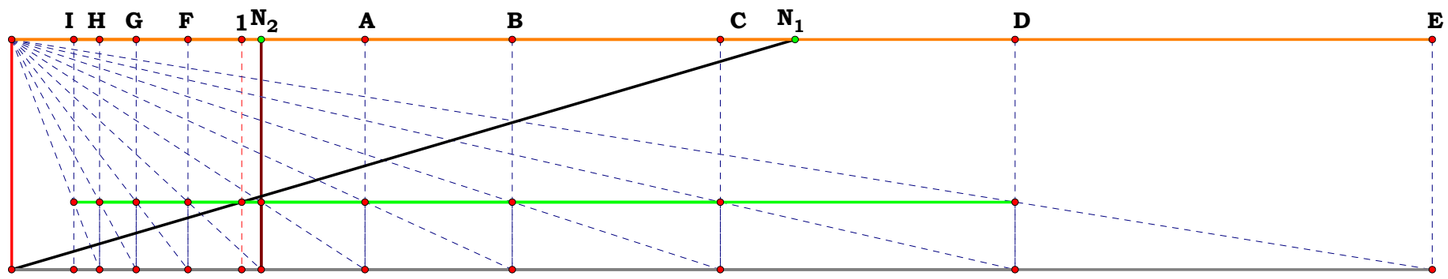
$\frac{N_1^5}{((((N_1^5-5\cdot N_1^4)+10\cdot N_1^3)-10\cdot N_1^2)+5\cdot N_1)-1}$-E = 0.00000

$\frac{(((N_1^4-4\cdot N_1^3)+6\cdot N_1^2)-4\cdot N_1)+1}{N_1^4}$-I = 0.00000

$\frac{((N_1^3-3\cdot N_1^2)+3\cdot N_1)-1}{N_1^3}$-H = 0.00000

$\frac{(N_1^2-2\cdot N_1)+1}{N_1^2}$-G = 0.00000

$\frac{N_1-1}{N_1}$-F = 0.00000



$N_1 = 3.40410$

$N_2 = 1.08464$

$\frac{N_1}{N_1-1} = 1.41596$

$A = 1.53580$

$B = 2.17463$

$C = 3.07918$

$D = 4.35999$

$E = 6.17356$

$F = 0.76601$

$G = 0.54099$

$H = 0.38206$

$I = 0.26983$

$N_2 \cdot \frac{N_1}{N_1-1}^{1} - A = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{2} - B = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{3} - C = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{4} - D = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{5} - E = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{-1} - F = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{-2} - G = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{-3} - H = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{-4} - I = 0.00000$

$\frac{N_1 \cdot N_2}{N_1-1} - A = 0.00000$

$\frac{N_1^2 \cdot N_2}{(N_1^2-2 \cdot N_1)+1} - B = 0.00000$

$\frac{N_1^3 \cdot N_2}{((N_1^3-3 \cdot N_1^2)+3 \cdot N_1)-1} - C = 0.00000$

$\frac{N_1^4 \cdot N_2}{(((N_1^4-4 \cdot N_1^3)+6 \cdot N_1^2)-4 \cdot N_1)+1} - D = 0.00000$

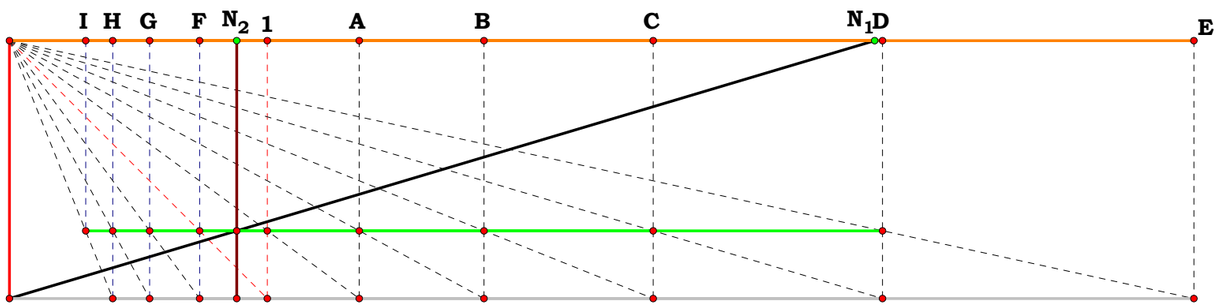
$\frac{N_1^5 \cdot N_2}{((((N_1^5-5 \cdot N_1^4)+10 \cdot N_1^3)-10 \cdot N_1^2)+5 \cdot N_1)-1} - E = 0.00000$

$\frac{(((N_1^4 \cdot N_2-4 \cdot N_1^3 \cdot N_2)+6 \cdot N_1^2 \cdot N_2)-4 \cdot N_1 \cdot N_2)+N_2}{N_1^4} - I = 0.00000$

$\frac{((N_1^3 \cdot N_2-3 \cdot N_1^2 \cdot N_2)+3 \cdot N_1 \cdot N_2)-N_2}{N_1^3} - H = 0.00000$

$\frac{(N_1^2 \cdot N_2-2 \cdot N_1 \cdot N_2)+N_2}{N_1^2} - G = 0.00000$

$\frac{N_1 \cdot N_2-N_2}{N_1} - F = 0.00000$



$N_1 = 3.35471$

$N_2 = 0.88158$

$\frac{N_1}{N_1-N_2} = 1.35646$

$A = 1.35646$ $\left(\frac{N_1}{N_1-N_2}\right)^{1}$ $-A = 0.00000$

$B = 1.83999$

$C = 2.49587$

$D = 3.38555$

$E = 4.59236$

$F = 0.73721$

$G = 0.54348$

$H = 0.40066$

$I = 0.29537$

$\left(\frac{N_1}{N_1-N_2}\right)^{2}$ $-B = 0.00000$

$\left(\frac{N_1}{N_1-N_2}\right)^{3}$ $-C = 0.00000$

$\left(\frac{N_1}{N_1-N_2}\right)^{4}$ $-D = 0.00000$

$\left(\frac{N_1}{N_1-N_2}\right)^{5}$ $-E = 0.00000$

$\left(\frac{N_1}{N_1-N_2}\right)^{-1}$ $-F = 0.00000$

$\left(\frac{N_1}{N_1-N_2}\right)^{-2}$ $-G = 0.00000$

$\left(\frac{N_1}{N_1-N_2}\right)^{-3}$ $-H = 0.00000$

$\left(\frac{N_1}{N_1-N_2}\right)^{-4}$ $-I = 0.00000$

$\frac{N_1}{N_1-N_2} - A = 0.00000$

$\frac{N_1^{2}}{(N_1^{2}-2\cdot N_1\cdot N_2)+N_2^{2}} - B = 0.00000$

$\frac{N_1^{3}}{((N_1^{3}-3\cdot N_1^{2}\cdot N_2)+3\cdot N_1\cdot N_2^{2})-N_2^{3}} - C = 0.00000$

$\frac{N_1^{4}}{(((N_1^{4}-4\cdot N_1^{3}\cdot N_2)+6\cdot N_1^{2}\cdot N_2^{2})-4\cdot N_1\cdot N_2^{3})+N_2^{4}} - D = 0.00000$

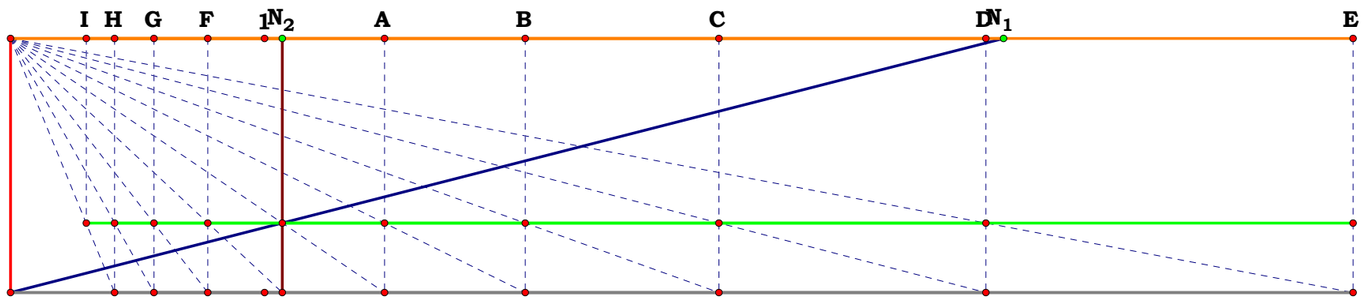
$\frac{N_1^{5}}{((((N_1^{5}-5\cdot N_1^{4}\cdot N_2)+10\cdot N_1^{3}\cdot N_2^{2})-10\cdot N_1^{2}\cdot N_2^{3})+5\cdot N_1\cdot N_2^{4})-N_2^{5}} - E = 0.00000$

$\frac{(((N_1^{4}-4\cdot N_1^{3}\cdot N_2)+6\cdot N_1^{2}\cdot N_2^{2})-4\cdot N_1\cdot N_2^{3})+N_2^{4}}{N_1^{4}} - I = 0.00000$

$\frac{((N_1^{3}-3\cdot N_1^{2}\cdot N_2)+3\cdot N_1\cdot N_2^{2})-N_2^{3}}{N_1^{3}} - H = 0.00000$

$\frac{(N_1^{2}-2\cdot N_1\cdot N_2)+N_2^{2}}{N_1^{2}} - G = 0.00000$

$\frac{N_1-N_2}{N_1} - F = 0.00000$



$N_1 = 3.90793$

$N_2 = 1.06894$

$\frac{N_1}{N_1-N_2} = 1.37652$

$A = 1.47142$

$B = 2.02544$

$C = 2.78806$

$D = 3.83782$

$E = 5.28284$

$F = 0.77655$

$G = 0.56414$

$H = 0.40983$

$I = 0.29773$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{1} - A = 0.00000$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{2} - B = 0.00000$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{3} - C = 0.00000$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{4} - D = 0.00000$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{5} - E = 0.00000$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-1} - F = 0.00000$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-2} - G = 0.00000$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-3} - H = 0.00000$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-4} - I = 0.00000$

$\frac{N_1 \cdot N_2}{N_1-N_2} - A = 0.00000$

$\frac{N_1^2 \cdot N_2}{(N_1^2-2 \cdot N_1 \cdot N_2)+N_2^2} - B = 0.00000$

$\frac{N_1^3 \cdot N_2}{((N_1^3-3 \cdot N_1^2 \cdot N_2)+3 \cdot N_1 \cdot N_2^2)-N_2^3} - C = 0.00000$

$\frac{N_1^4 \cdot N_2}{(((N_1^4-4 \cdot N_1^3 \cdot N_2)+6 \cdot N_1^2 \cdot N_2^2)-4 \cdot N_1 \cdot N_2^3)+N_2^4} - D = 0.00000$

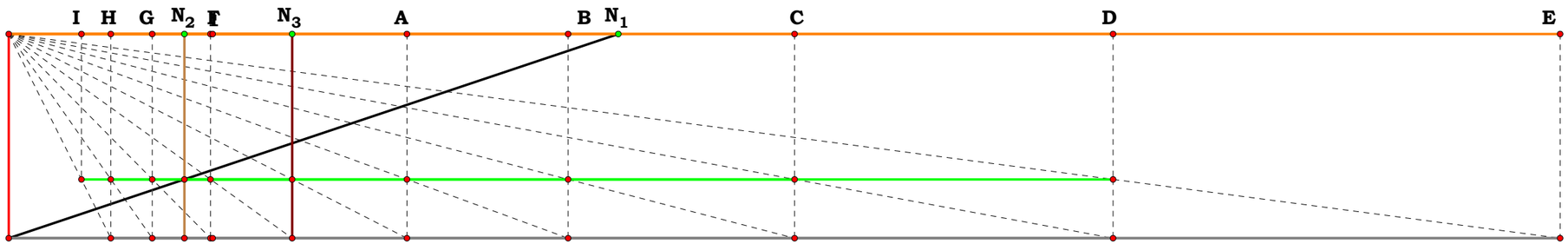
$\frac{N_1^5 \cdot N_2}{((((N_1^5-5 \cdot N_1^4 \cdot N_2)+10 \cdot N_1^3 \cdot N_2^2)-10 \cdot N_1^2 \cdot N_2^3)+5 \cdot N_1 \cdot N_2^4)-N_2^5} - E = 0.00000$

$\frac{(((N_1^4 \cdot N_2-4 \cdot N_1^3 \cdot N_2^2)+6 \cdot N_1^2 \cdot N_2^3)-4 \cdot N_1 \cdot N_2^4)+N_2^5}{N_1^4} - I = 0.00000$

$\frac{((N_1^3 \cdot N_2-3 \cdot N_1^2 \cdot N_2^2)+3 \cdot N_1 \cdot N_2^3)-N_2^4}{N_1^3} - H = 0.00000$

$\frac{(N_1^2 \cdot N_2-2 \cdot N_1 \cdot N_2^2)+N_2^3}{N_1^2} - G = 0.00000$

$\frac{N_1 \cdot N_2-N_2^2}{N_1} - F = 0.00000$



$N_1 = 2.98906$

$N_2 = 0.86166$

$N_3 = 1.38922$

$\frac{N_1}{N_1-N_2} = 1.40503$

$A = 1.95189$

$B = 2.74246$

$C = 3.85323$

$D = 5.41390$

$E = 7.60667$

$F = 0.98875$

$G = 0.70372$

$H = 0.50086$

$I = 0.35648$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{1} - A = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{2} - B = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{3} - C = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{4} - D = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{5} - E = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-1} - F = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-2} - G = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-3} - H = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-4} - I = 0.00000$

$\frac{N_1 \cdot N_3}{N_1-N_2} - A = 0.00000$

$\frac{N_1^2 \cdot N_3}{(N_1^2-2 \cdot N_1 \cdot N_2)+N_2^2} - B = 0.00000$

$\frac{N_1^3 \cdot N_3}{((N_1^3-3 \cdot N_1^2 \cdot N_2)+3 \cdot N_1 \cdot N_2^2)-N_2^3} - C = 0.00000$

$\frac{N_1^4 \cdot N_3}{(((N_1^4-4 \cdot N_1^3 \cdot N_2)+6 \cdot N_1^2 \cdot N_2^2)-4 \cdot N_1 \cdot N_2^3)+N_2^4} - D = 0.00000$

$\frac{N_1^5 \cdot N_3}{((((N_1^5-5 \cdot N_1^4 \cdot N_2)+10 \cdot N_1^3 \cdot N_2^2)-10 \cdot N_1^2 \cdot N_2^3)+5 \cdot N_1 \cdot N_2^4)-N_2^5} - E = 0.00000$

$\frac{(((N_1^4 \cdot N_3-4 \cdot N_1^3 \cdot N_2 \cdot N_3)+6 \cdot N_1^2 \cdot N_2^2 \cdot N_3)-4 \cdot N_1 \cdot N_2^3 \cdot N_3)+N_2^4 \cdot N_3}{N_1^4} - I = 0.00000$

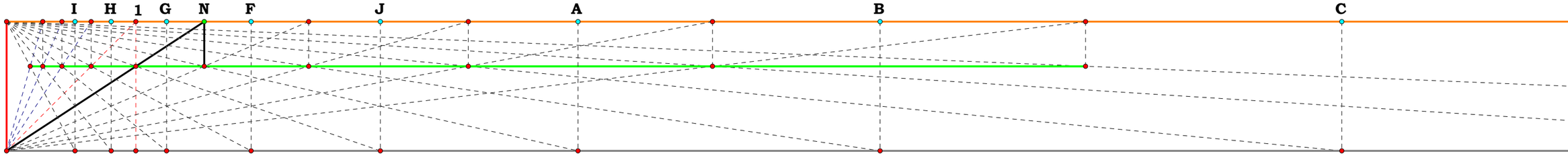
$\frac{((N_1^3 \cdot N_3-3 \cdot N_1^2 \cdot N_2 \cdot N_3)+3 \cdot N_1 \cdot N_2^2 \cdot N_3)-N_2^3 \cdot N_3}{N_1^3} - H = 0.00000$

$\frac{(N_1^2 \cdot N_3-2 \cdot N_1 \cdot N_2 \cdot N_3)+N_2^2 \cdot N_3}{N_1^2} - G = 0.00000$

$\frac{N_1 \cdot N_3-N_2 \cdot N_3}{N_1} - F = 0.00000$

$N = 1.52865$

$\frac{N}{N-1} = 2.89162$



$J = 2.89162$

$A = 4.42026$

$B = 6.75703$

$C = 10.32913$

$D = 15.78961$

$E = 24.13676$

$F = 1.89162$

$G = 1.23744$

$H = 0.80950$

$I = 0.52955$

$N^{0}.\frac{N}{N-1}-J = 0.00000$

$N^{1}.\frac{N}{N-1}-A = 0.00000$

$N^{2}.\frac{N}{N-1}-B = 0.00000$

$N^{3}.\frac{N}{N-1}-C = 0.00000$

$N^{4}.\frac{N}{N-1}-D = 0.00000$

$N^{5}.\frac{N}{N-1}-E = 0.00000$

$N^{-1}.\frac{N}{N-1}-F = 0.00000$

$N^{-2}.\frac{N}{N-1}-G = 0.00000$

$N^{-3}.\frac{N}{N-1}-H = 0.00000$

$N^{-4}.\frac{N}{N-1}-I = 0.00000$

$\frac{N}{N-1}-J = 0.00000$

$\frac{N^{2}}{N-1}-A = 0.00000$

$\frac{N^{3}}{N-1}-B = 0.00000$

$\frac{N^{4}}{N-1}-C = 0.00000$

$\frac{N^{5}}{N-1}-D = 0.00000$

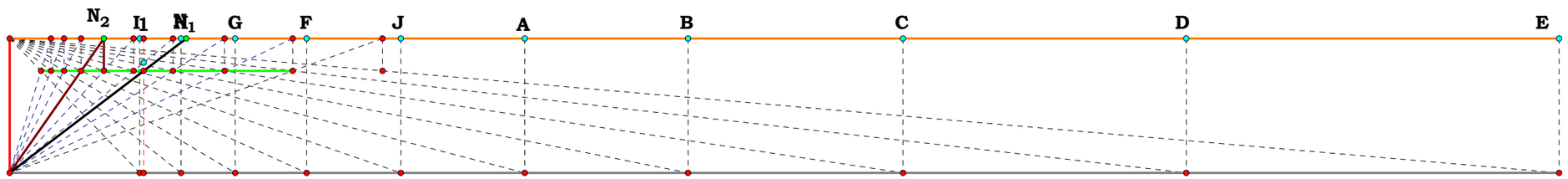
$\frac{N^{6}}{N-1}-E = 0.00000$

$\frac{1}{N-1}-F = 0.00000$

$\frac{1}{N^{2}-N}-G = 0.00000$

$\frac{1}{N^{3}-N^{2}}-H = 0.00000$

$\frac{1}{N^{4}-N^{3}}-I = 0.00000$



$N_1 = 1.31693$

$N_2 = 0.70206$

$\frac{N_1 \cdot N_2}{N_1 - 1} = 2.91723$

$J = 2.91723$

$A = 3.84179$

$B = 5.05937$

$C = 6.66284$

$D = 8.77451$

$E = 11.55542$

$F = 2.21517$

$G = 1.68207$

$H = 1.27727$

$I = 0.96988$

$N_1^{0} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - J = 0.00000$

$N_1^{1} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - A = 0.00000$

$N_1^{2} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - B = 0.00000$

$N_1^{3} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - C = 0.00000$

$N_1^{4} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - D = 0.00000$

$N_1^{5} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - E = 0.00000$

$N_1^{-1} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - F = 0.00000$

$N_1^{-2} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - G = 0.00000$

$N_1^{-3} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - H = 0.00000$

$N_1^{-4} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - I = 0.00000$

$\frac{N_1 \cdot N_2}{N_1 - 1} - J = 0.00000$

$\frac{N_1^{2} \cdot N_2}{N_1 - 1} - A = 0.00000$

$\frac{N_1^{3} \cdot N_2}{N_1 - 1} - B = 0.00000$

$\frac{N_1^{4} \cdot N_2}{N_1 - 1} - C = 0.00000$

$\frac{N_1^{5} \cdot N_2}{N_1 - 1} - D = 0.00000$

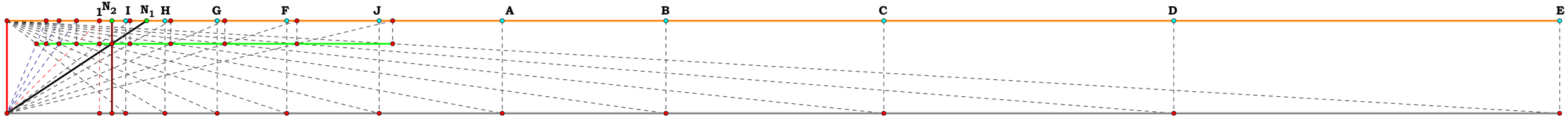
$\frac{N_1^{6} \cdot N_2}{N_1 - 1} - E = 0.00000$

$\frac{N_2}{N_1 - 1} - F = 0.00000$

$\frac{N_2}{N_1^{2} - N_1} - G = 0.00000$

$\frac{N_2}{N_1^{3} - N_1^{2}} - H = 0.00000$

$\frac{N_2}{N_1^{4} - N_1^{3}} - I = 0.00000$



$N_1 = 1.51037$

$N_2 = 1.13509$

$\frac{N_1}{N_2} = 1.33062$

$\frac{N_1}{N_1-N_2} = 4.02464$

$J = 4.02464$

$A = 5.35525$

$B = 7.12580$

$C = 9.48172$

$D = 12.61655$

$E = 16.78781$

$F = 3.02464$

$G = 2.27310$

$H = 1.70831$

$I = 1.28384$

$\frac{N_1^{0}}{N_2} \cdot \frac{N_1}{N_1-N_2} - J = 0.00000$

$\frac{N_1^{1}}{N_2} \cdot \frac{N_1}{N_1-N_2} - A = 0.00000$

$\frac{N_1^{2}}{N_2} \cdot \frac{N_1}{N_1-N_2} - B = 0.00000$

$\frac{N_1^{3}}{N_2} \cdot \frac{N_1}{N_1-N_2} - C = 0.00000$

$\frac{N_1^{4}}{N_2} \cdot \frac{N_1}{N_1-N_2} - D = 0.00000$

$\frac{N_1^{5}}{N_2} \cdot \frac{N_1}{N_1-N_2} - E = 0.00000$

$\frac{N_1^{-1}}{N_2} \cdot \frac{N_1}{N_1-N_2} - F = 0.00000$

$\frac{N_1^{-2}}{N_2} \cdot \frac{N_1}{N_1-N_2} - G = 0.00000$

$\frac{N_1^{-3}}{N_2} \cdot \frac{N_1}{N_1-N_2} - H = 0.00000$

$\frac{N_1^{-4}}{N_2} \cdot \frac{N_1}{N_1-N_2} - I = 0.00000$

$\frac{N_1}{N_1-N_2} - J = 0.00000$

$\frac{N_1^{2}}{N_1 \cdot N_2 - N_2^{2}} - A = 0.00000$

$\frac{N_1^{3}}{N_1 \cdot N_2^{2} - N_2^{3}} - B = 0.00000$

$\frac{N_1^{4}}{N_1 \cdot N_2^{3} - N_2^{4}} - C = 0.00000$

$\frac{N_1^{5}}{N_1 \cdot N_2^{4} - N_2^{5}} - D = 0.00000$

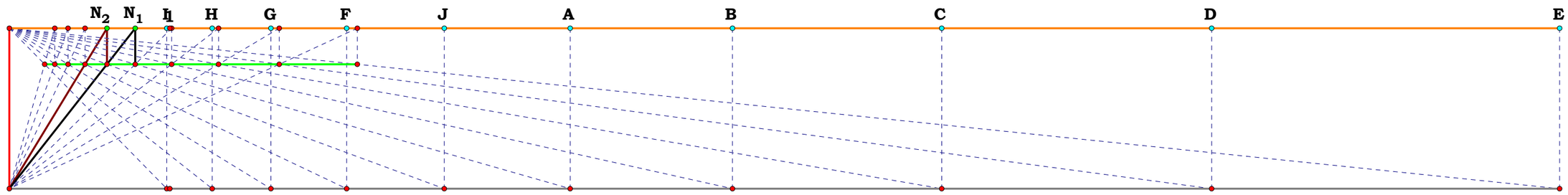
$\frac{N_1^{6}}{N_1 \cdot N_2^{5} - N_2^{6}} - E = 0.00000$

$\frac{N_2}{N_1-N_2} - F = 0.00000$

$\frac{N_2^{2}}{N_1^{2} - N_1 \cdot N_2} - G = 0.00000$

$\frac{N_2^{3}}{N_1^{3} - N_1^{2} \cdot N_2} - H = 0.00000$

$\frac{N_2^{4}}{N_1^{4} - N_1^{3} \cdot N_2} - I = 0.00000$



$N_1 = 0.78415$

$N_2 = 0.60814$

$\frac{N_1}{N_2} = 1.28943$

$\frac{N_1 \cdot N_2}{N_1 - N_2} = 2.70928$

$J = 2.70928$

$A = 3.49343$

$B = 4.50454$

$C = 5.80830$

$D = 7.48941$

$E = 9.65708$

$F = 2.10114$

$G = 1.62951$

$H = 1.26374$

$I = 0.98008$

$\frac{N_1^{0}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - J = 0.00000$

$\frac{N_1^{1}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - A = 0.00000$

$\frac{N_1^{2}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - B = 0.00000$

$\frac{N_1^{3}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - C = 0.00000$

$\frac{N_1^{4}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - D = 0.00000$

$\frac{N_1^{5}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - E = 0.00000$

$\frac{N_1^{-1}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - F = 0.00000$

$\frac{N_1^{-2}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - G = 0.00000$

$\frac{N_1^{-3}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - H = 0.00000$

$\frac{N_1^{-4}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - I = 0.00000$

$\frac{N_1 \cdot N_2}{N_1 - N_2} - J = 0.00000$

$\frac{N_1^{2}}{N_1 - N_2} - A = 0.00000$

$\frac{N_1^{3}}{N_1 \cdot N_2 - N_2^{2}} - B = 0.00000$

$\frac{N_1^{4}}{N_1 \cdot N_2^{2} - N_2^{3}} - C = 0.00000$

$\frac{N_1^{5}}{N_1 \cdot N_2^{3} - N_2^{4}} - D = 0.00000$

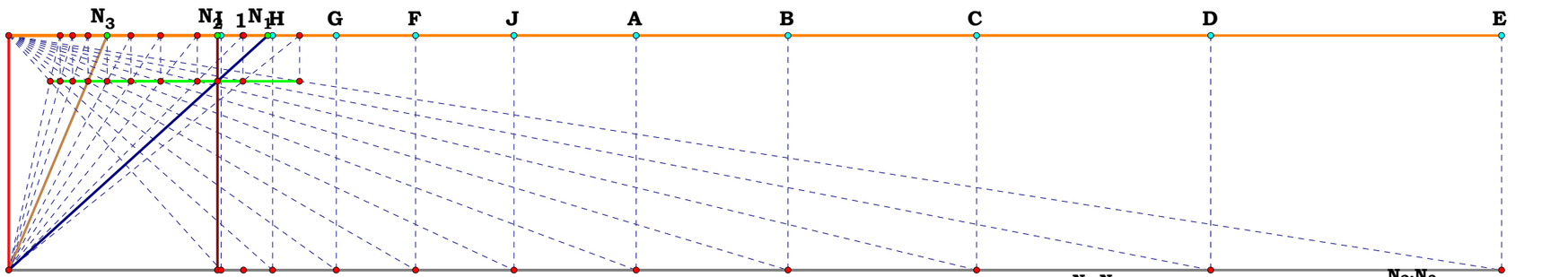
$\frac{N_1^{6}}{N_1 \cdot N_2^{4} - N_2^{5}} - E = 0.00000$

$\frac{N_2^{2}}{N_1 - N_2} - F = 0.00000$

$\frac{N_2^{3}}{N_1^{2} - N_1 \cdot N_2} - G = 0.00000$

$\frac{N_2^{4}}{N_1^{3} - N_1^{2} \cdot N_2} - H = 0.00000$

$\frac{N_2^{5}}{N_1^{4} - N_1^{3} \cdot N_2} - I = 0.00000$



$N_1 = 1.10350$

$N_2 = 0.88853$

$N_3 = 0.41903$

$\frac{N_1}{N_2} = 1.24195$

$\frac{N_1 \cdot N_3}{N_1 - N_2} = 2.15096$

$J = 2.15096$

$A = 2.67138$

$B = 3.31772$

$C = 4.12043$

$D = 5.11735$

$E = 6.35548$

$F = 1.73193$

$G = 1.39453$

$H = 1.12286$

$I = 0.90411$

$\frac{N_1^{\,0}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - J = 0.00000$

$\frac{N_1^{\,1}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - A = 0.00000$

$\frac{N_1^{\,2}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - B = 0.00000$

$\frac{N_1^{\,3}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - C = 0.00000$

$\frac{N_1^{\,4}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - D = 0.00000$

$\frac{N_1^{\,5}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - E = 0.00000$

$\frac{N_1^{\,-1}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - F = 0.00000$

$\frac{N_1^{\,-2}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - G = 0.00000$

$\frac{N_1^{\,-3}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - H = 0.00000$

$\frac{N_1^{\,-4}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - I = 0.00000$

$\frac{N_1 \cdot N_3}{N_1 - N_2} - J = 0.00000$

$\frac{N_1^{\,2} \cdot N_3}{N_1 \cdot N_2 - N_2^{\,2}} - A = 0.00000$

$\frac{N_1^{\,3} \cdot N_3}{N_1 \cdot N_2^{\,2} - N_2^{\,3}} - B = 0.00000$

$\frac{N_1^{\,4} \cdot N_3}{N_1 \cdot N_2^{\,3} - N_2^{\,4}} - C = 0.00000$

$\frac{N_1^{\,5} \cdot N_3}{N_1 \cdot N_2^{\,4} - N_2^{\,5}} - D = 0.00000$

$\frac{N_1^{\,6} \cdot N_3}{N_1 \cdot N_2^{\,5} - N_2^{\,6}} - E = 0.00000$

$\frac{N_2 \cdot N_3}{N_1 - N_2} - F = 0.00000$

$\frac{N_2^{\,2} \cdot N_3}{N_1^{\,2} - N_1 \cdot N_2} - G = 0.00000$

$\frac{N_2^{\,3} \cdot N_3}{N_1^{\,3} - N_1^{\,2} \cdot N_2} - H = 0.00000$

$\frac{N_2^{\,4} \cdot N_3}{N_1^{\,4} - N_1^{\,3} \cdot N_2} - I = 0.00000$

Show Lines

0

1

$N_1 = 0.53608$

$R_1 = 0.14791$

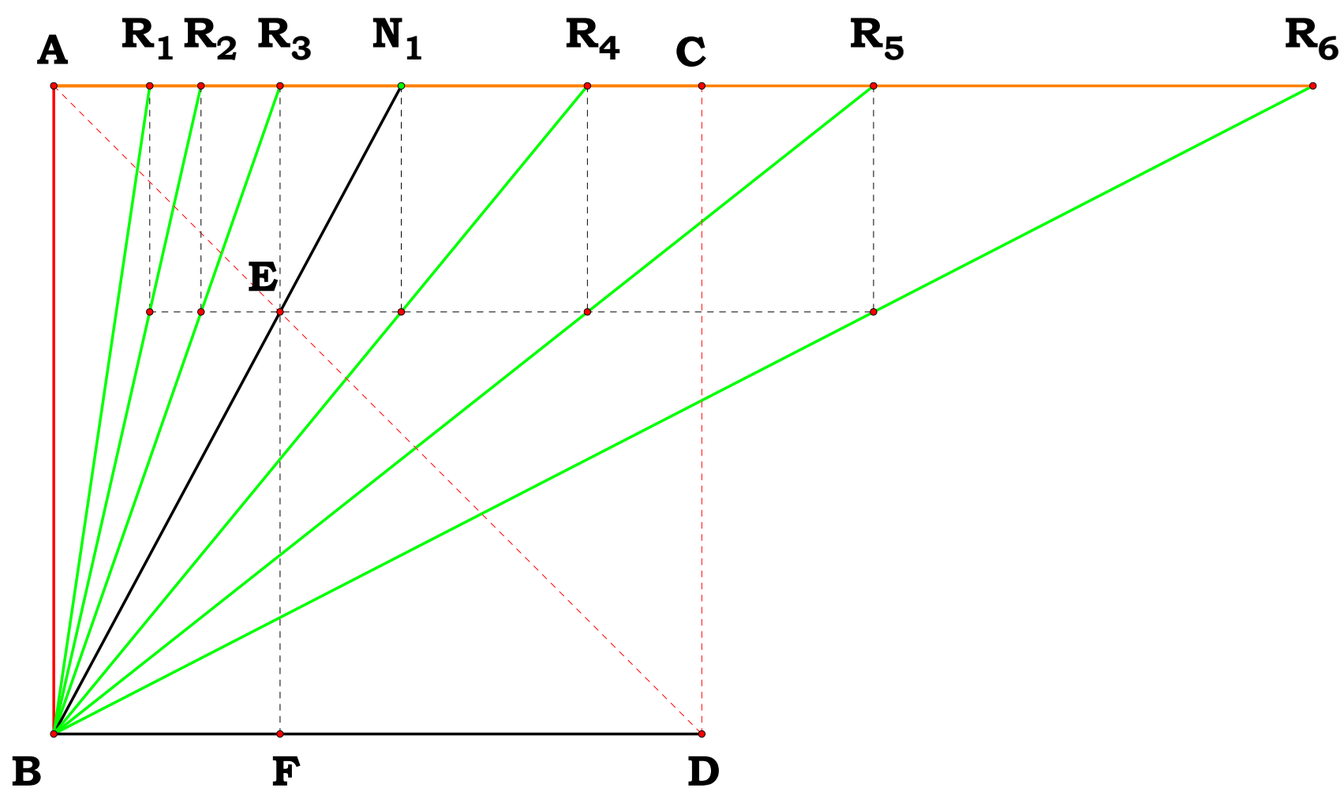
$R_2 = 0.22720$

$R_3 = 0.34899$

$R_4 = 0.82347$

$R_5 = 1.26492$

$R_6 = 1.94302$



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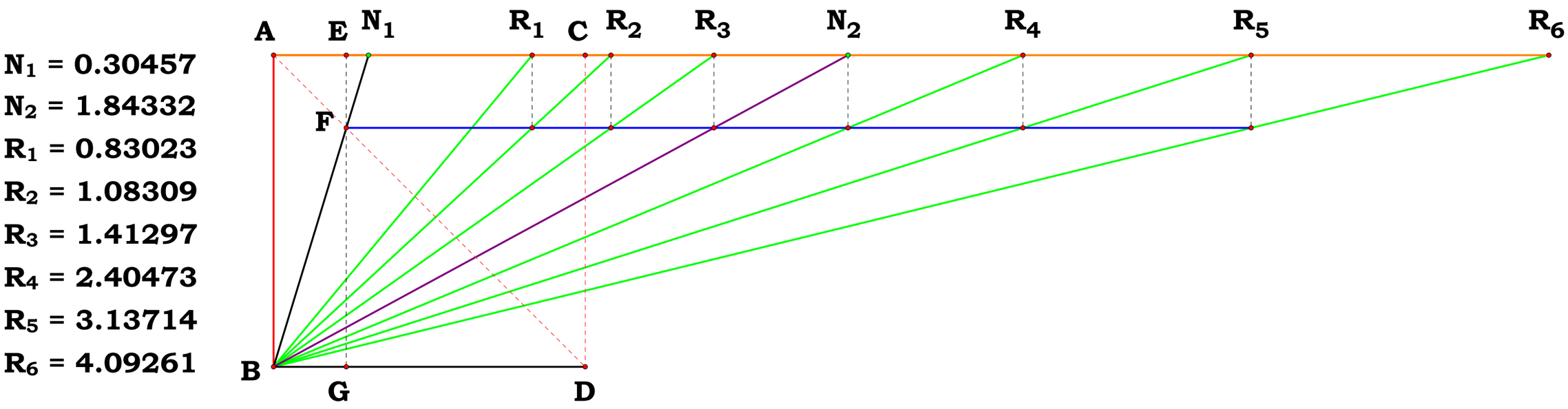

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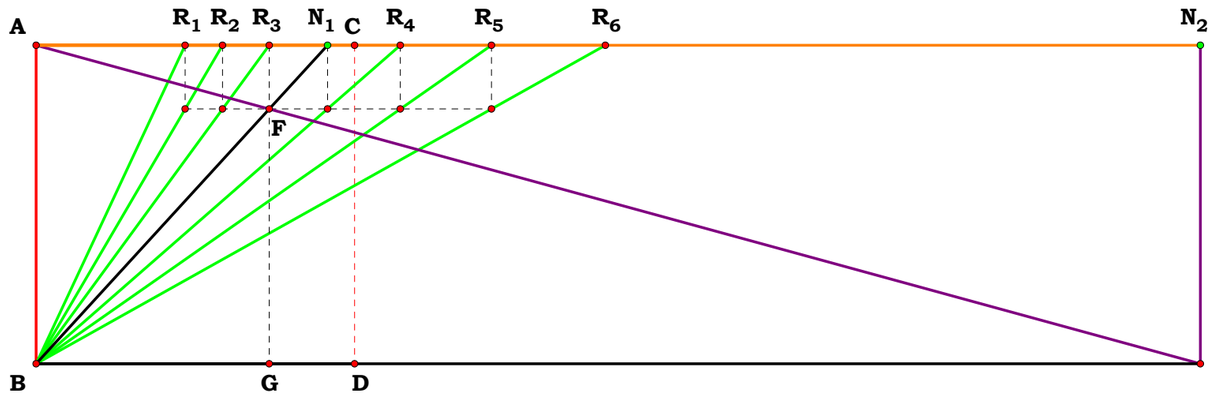
$N_1 = 0.91460$
$N_2 = 3.65482$
$R_1 = 0.46800$
$R_2 = 0.58511$
$R_3 = 0.73154$
$R_4 = 1.14348$
$R_5 = 1.42962$
$R_6 = 1.78738$



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$N_1 = 0.81913$

$N_2 = 4.51670$

$N_3 = 2.41008$

$R_1 = 1.46181$

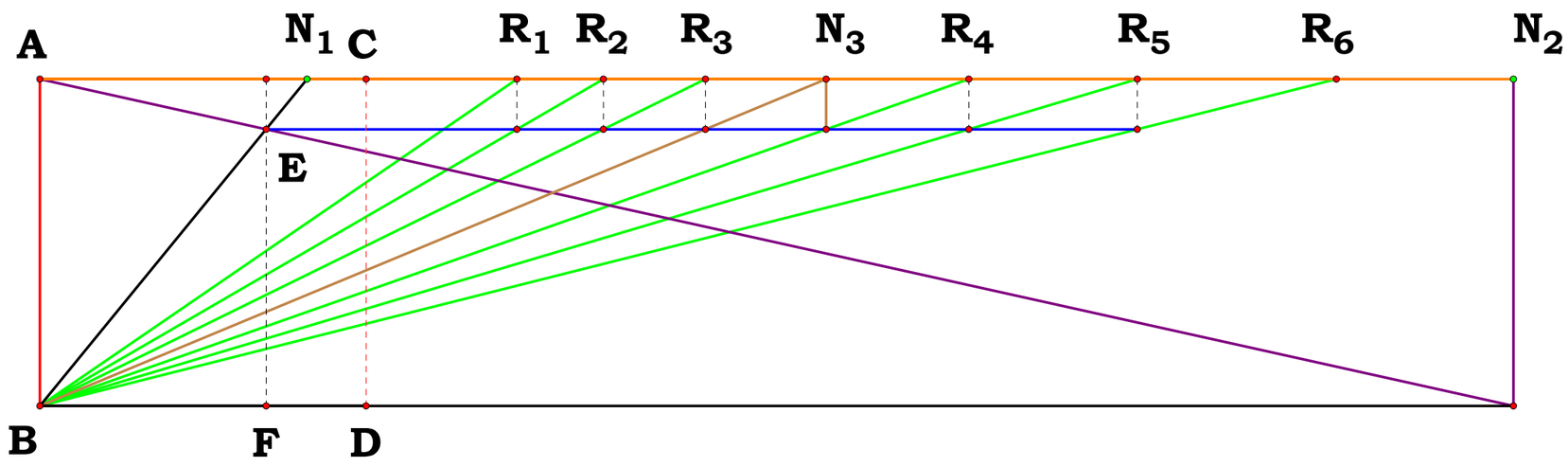
$R_2 = 1.72692$

$R_3 = 2.04010$

$R_4 = 2.84716$

$R_5 = 3.36351$

$R_6 = 3.97350$



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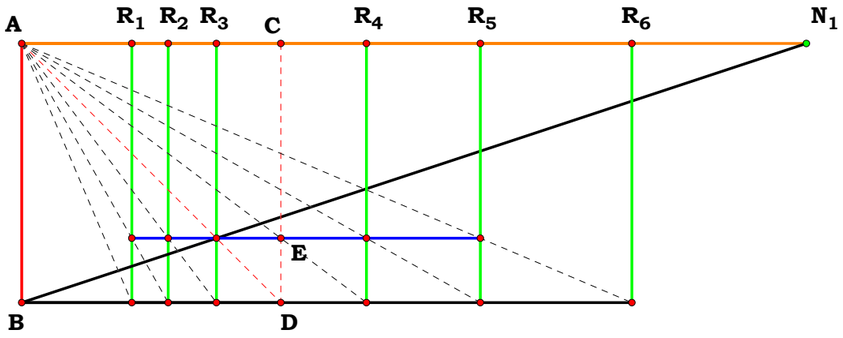
$N_1 = 3.02713$
$R_1 = 0.42472$
$R_2 = 0.56503$
$R_3 = 0.75168$
$R_4 = 1.33035$
$R_5 = 1.76982$
$R_6 = 2.35447$



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N_1 = 4.53658

N_2 = 1.62541

R_1 = 0.64861

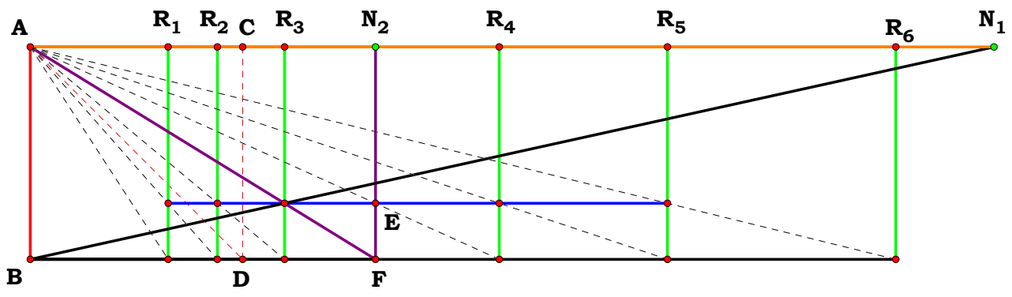
R_2 = 0.88101

R_3 = 1.19666

R_4 = 2.20778

R_5 = 2.99881

R_6 = 4.07326



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$N_1 = 3.33571$

$N_2 = 0.60841$

$N_3 = 1.52355$

$R_1 = 0.92166$

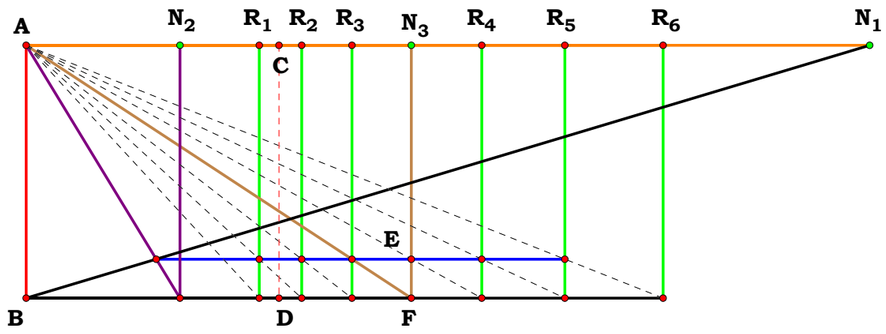
$R_2 = 1.08976$

$R_3 = 1.28853$

$R_4 = 1.80143$

$R_5 = 2.13000$

$R_6 = 2.51849$



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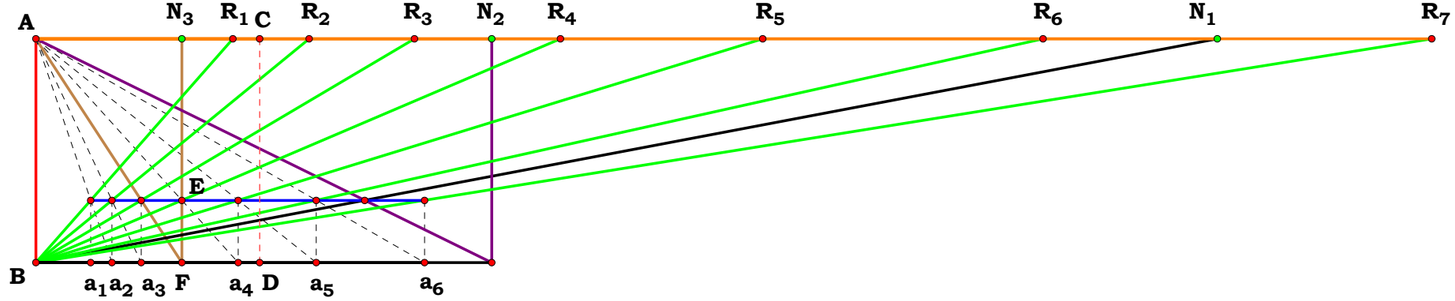

$N_1 = 5.27896$

$N_2 = 2.03640$

$N_3 = 0.65237$

$R_1 = 0.88066$

$R_2 = 1.22038$

$R_3 = 1.69115$

$R_4 = 2.34353$

$R_5 = 3.24756$

$R_6 = 4.50033$

$R_7 = 6.23636$

$x_{a_1} = 0.24515$

$x_{a_2} = 0.33972$

$x_{a_3} = 0.47077$

$x_{a_4} = 0.90403$

$x_{a_5} = 1.25277$

$x_{a_6} = 1.73604$

Circle

Show Lines

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1

$N_1 = 1.55615$

$R_1 = 0.16123$

$R_2 = 0.22781$

$R_3 = 0.32188$

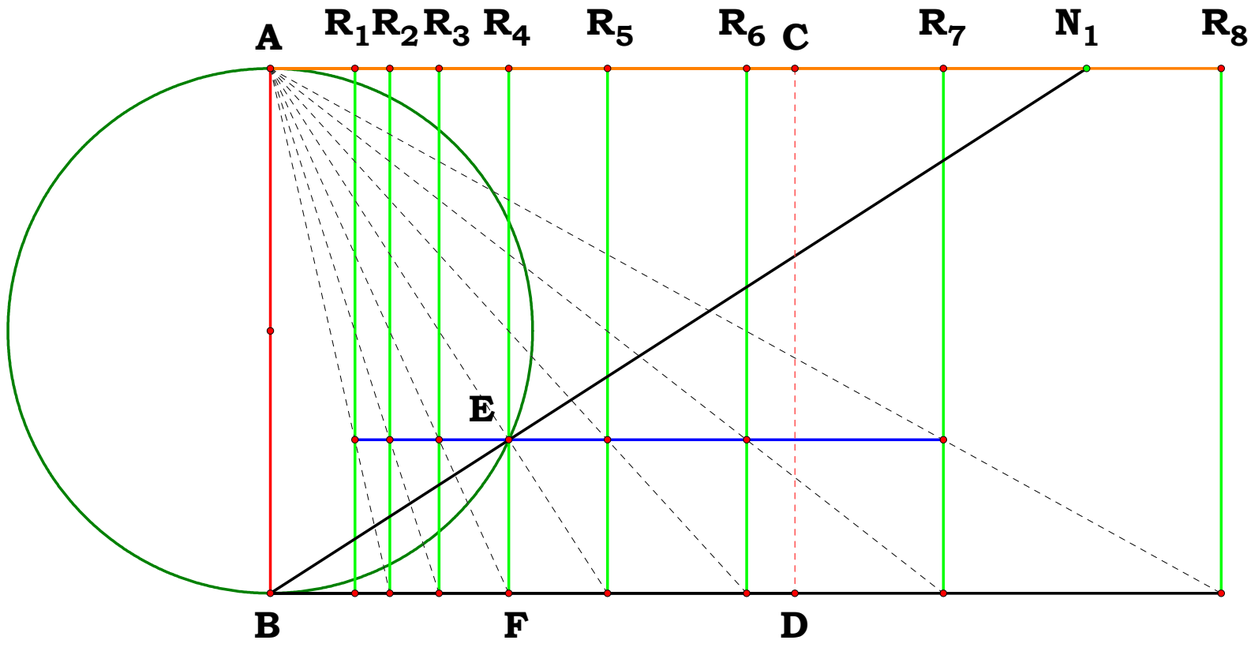
$R_4 = 0.45480$

$R_5 = 0.64261$

$R_6 = 0.90798$

$R_7 = 1.28293$

$R_8 = 1.81271$



Circle

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1

N_1 = 1.67987

R_1 = 0.67619

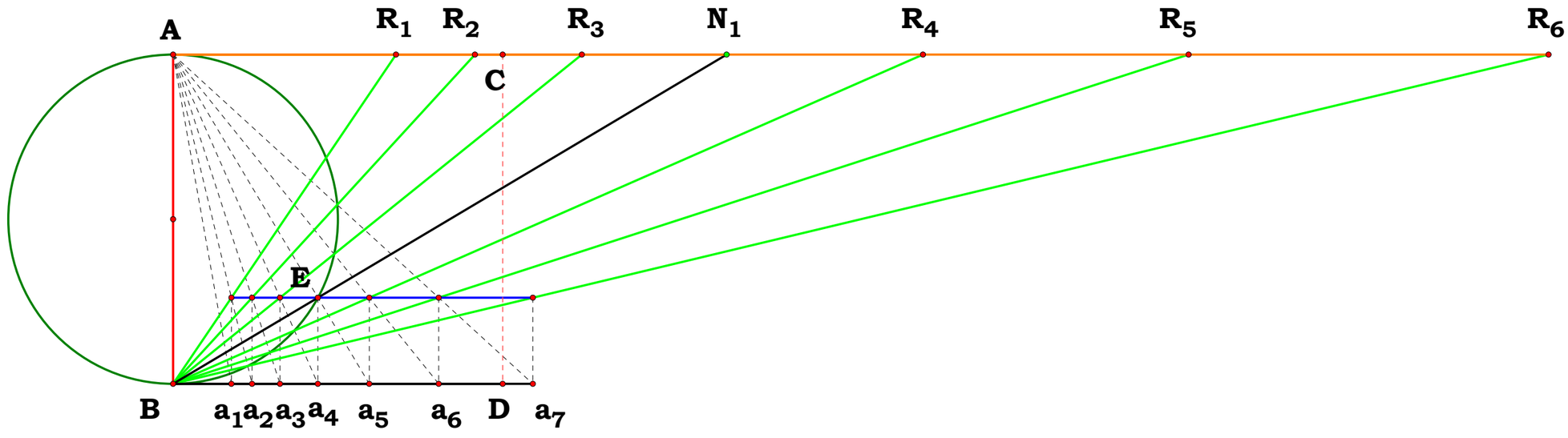
R_2 = 0.91580

R_3 = 1.24033

R_4 = 2.27515

R_5 = 3.08139

R_6 = 4.17332



Circle

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$N_1 = 2.35356$

$N_2 = 1.84796$

$R_1 = 1.12321$

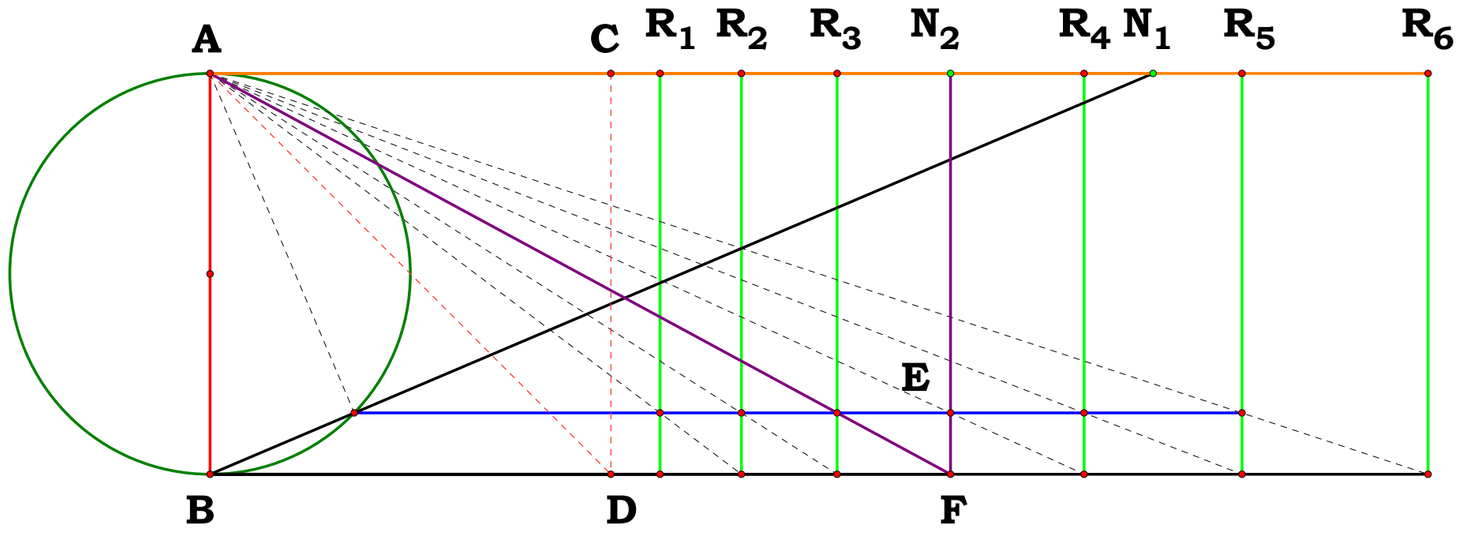
$R_2 = 1.32598$

$R_3 = 1.56536$

$R_4 = 2.18157$

$R_5 = 2.57541$

$R_6 = 3.04035$



Circle

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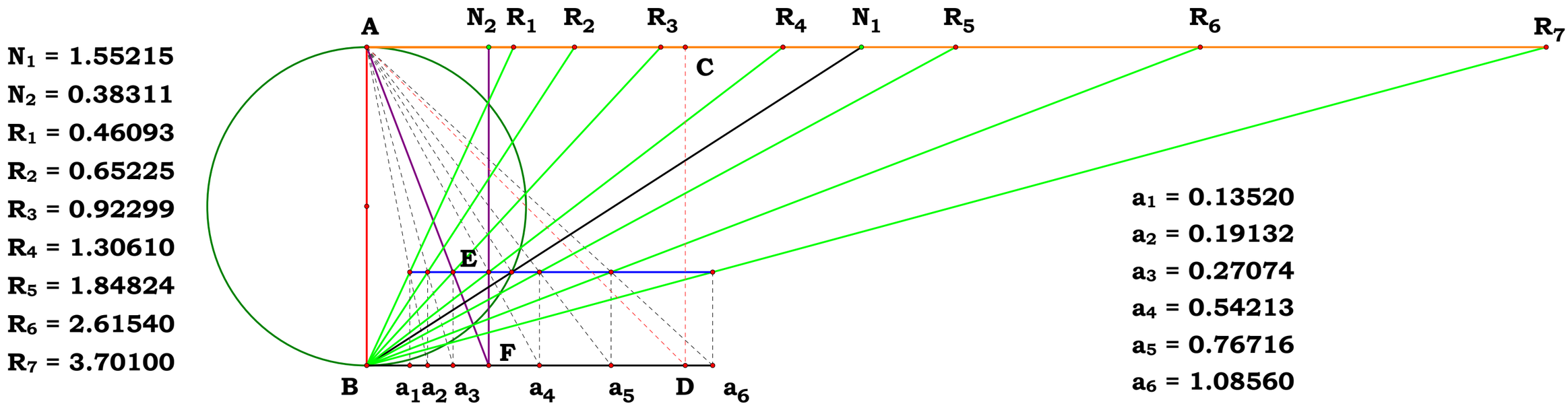

$N_1 = 1.55215$

$N_2 = 0.38311$

$R_1 = 0.46093$

$R_2 = 0.65225$

$R_3 = 0.92299$

$R_4 = 1.30610$

$R_5 = 1.84824$

$R_6 = 2.61540$

$R_7 = 3.70100$

$a_1 = 0.13520$

$a_2 = 0.19132$

$a_3 = 0.27074$

$a_4 = 0.54213$

$a_5 = 0.76716$

$a_6 = 1.08560$

Circle
Show Lines
0
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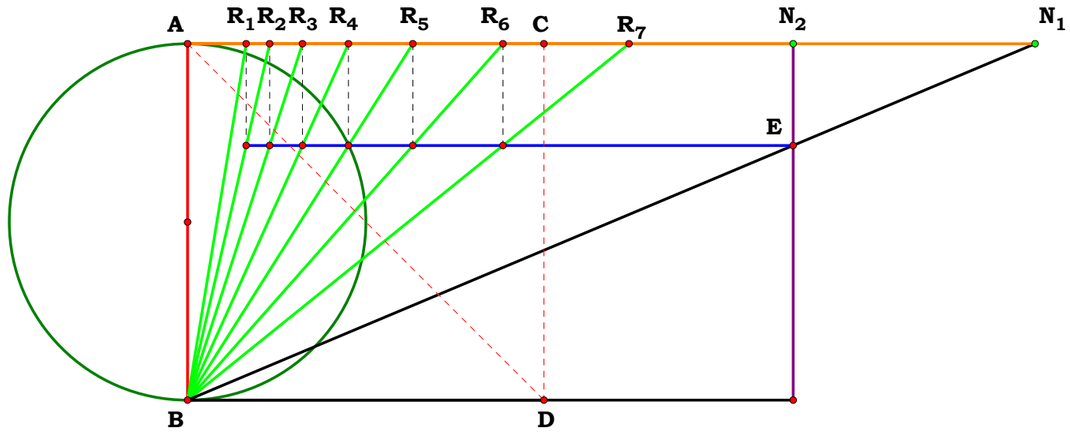
N_1 = 2.37839
N_2 = 1.69911
R_1 = 0.16469
R_2 = 0.23053
R_3 = 0.32269
R_4 = 0.45170
R_5 = 0.63229
R_6 = 0.88507
R_7 = 1.23891



Circle

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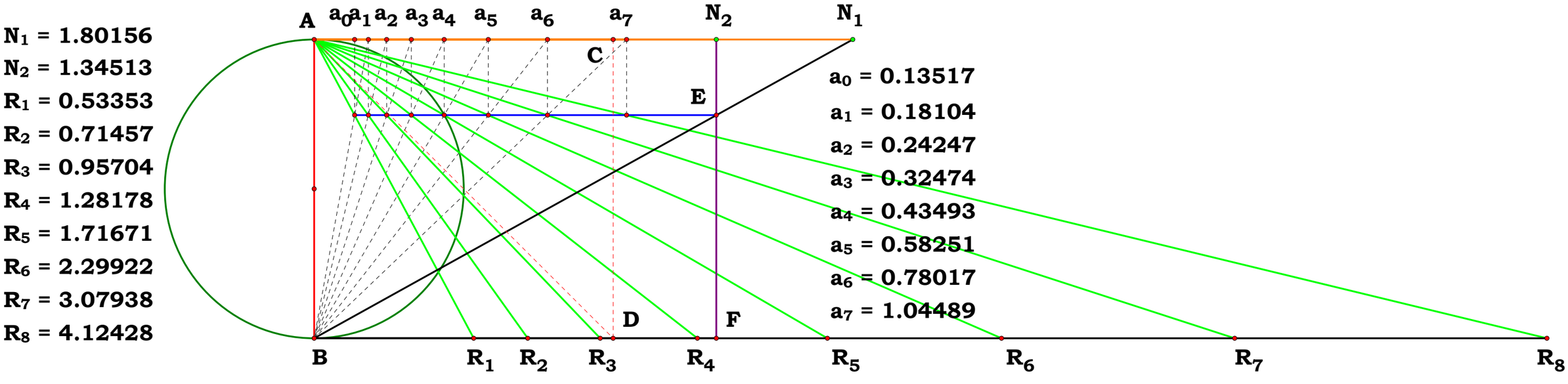

Circle

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$N_1 = 3.00270$

$N_2 = 1.12066$

$R_1 = 0.11909$

$R_2 = 0.19001$

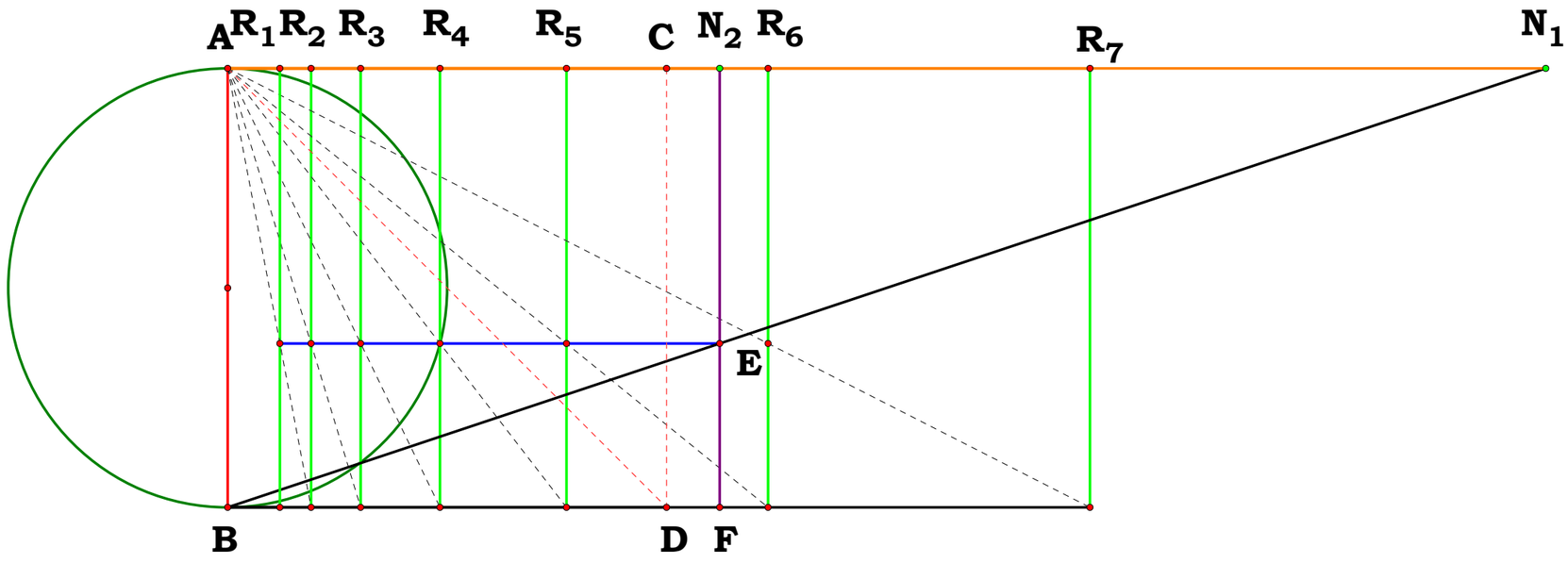
$R_3 = 0.30315$

$R_4 = 0.48366$

$R_5 = 0.77165$

$R_6 = 1.23113$

$R_7 = 1.96421$



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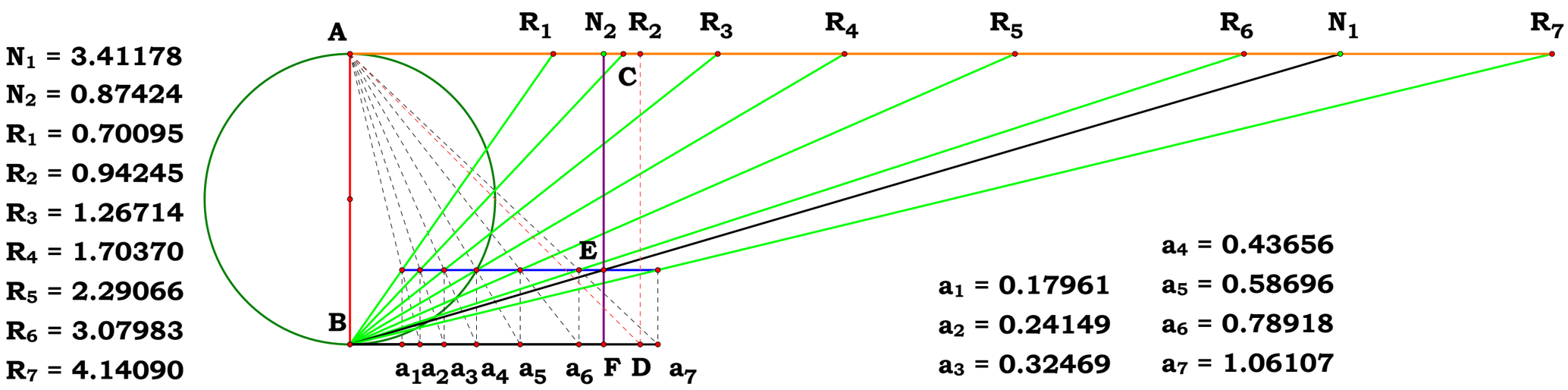

$N_1 = 3.41178$

$N_2 = 0.87424$

$R_1 = 0.70095$

$R_2 = 0.94245$

$R_3 = 1.26714$

$R_4 = 1.70370$

$R_5 = 2.29066$

$R_6 = 3.07983$

$R_7 = 4.14090$

$a_1 = 0.17961$

$a_2 = 0.24149$

$a_3 = 0.32469$

$a_4 = 0.43656$

$a_5 = 0.58696$

$a_6 = 0.78918$

$a_7 = 1.06107$

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$N_1 = 1.88668$

$N_2 = 0.74332$

$R_1 = 0.81004$

$R_2 = 0.95928$

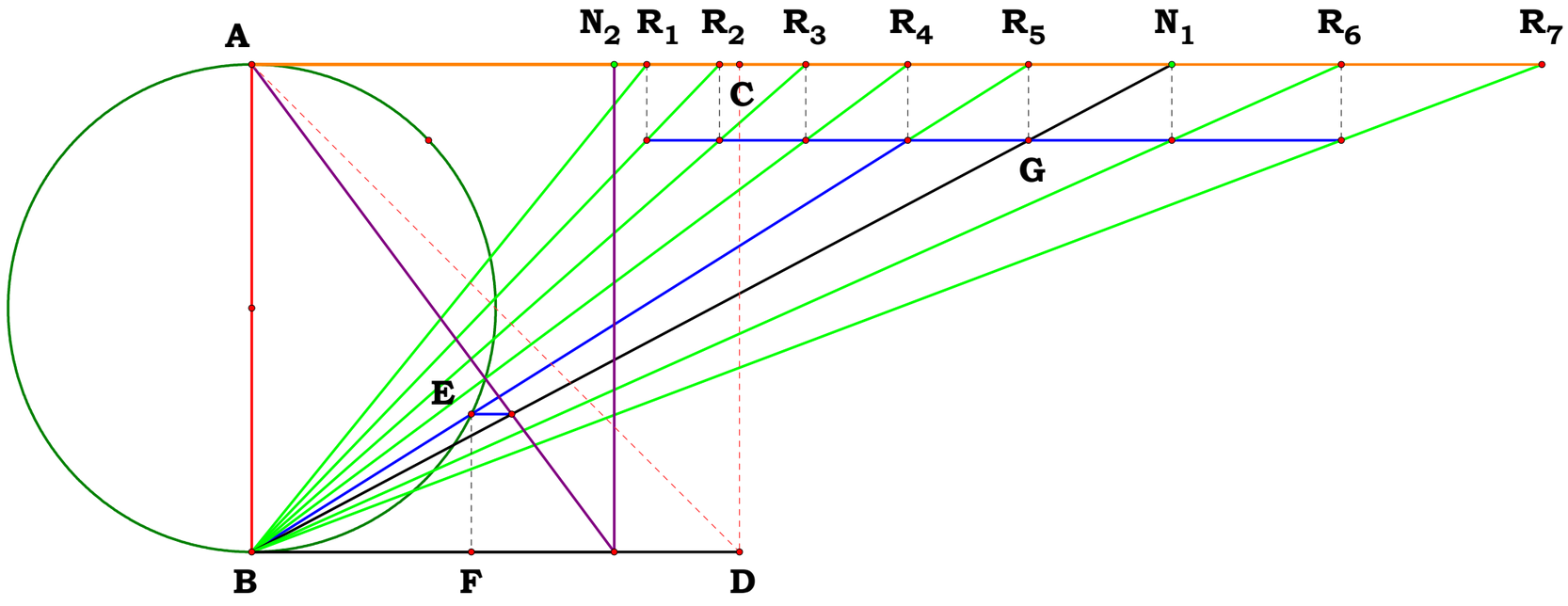
$R_3 = 1.13601$

$R_4 = 1.34531$

$R_5 = 1.59316$

$R_6 = 2.23428$

$R_7 = 2.64591$



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$N_1 = 0.54862$

$N_2 = 3.86863$

$R_1 = 0.26658$

$R_2 = 0.38837$

$R_3 = 0.56580$

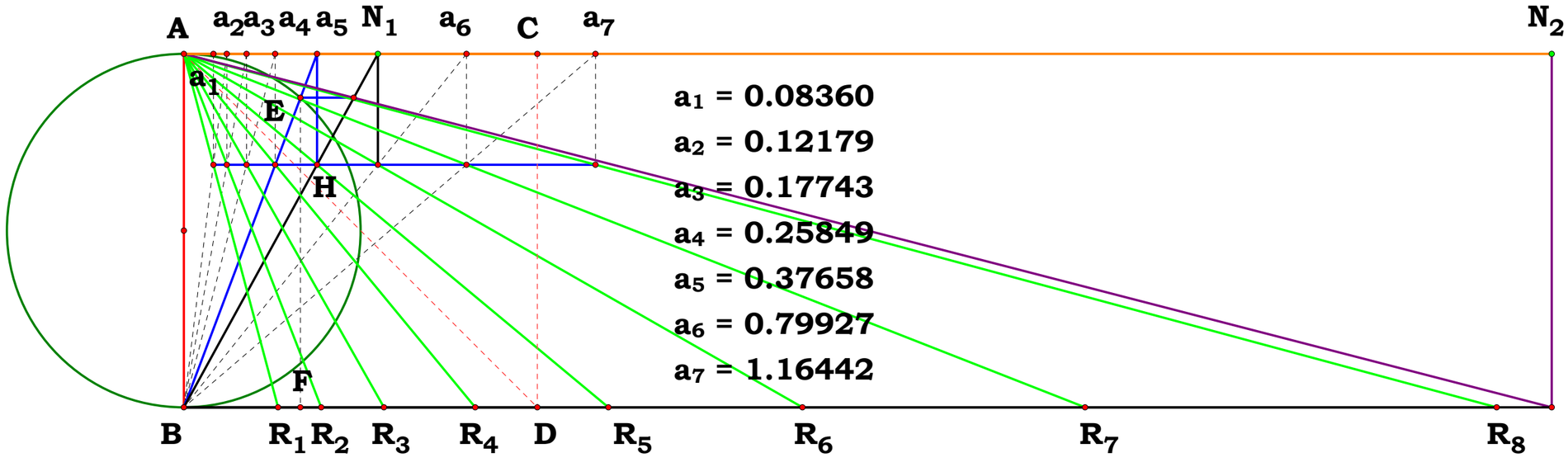
$R_4 = 0.82429$

$R_5 = 1.20087$

$R_6 = 1.74950$

$R_7 = 2.54876$

$R_8 = 3.71318$



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$N_1 = 3.42768$

$N_2 = 1.73283$

$R_1 = 0.35399$

$R_2 = 0.44663$

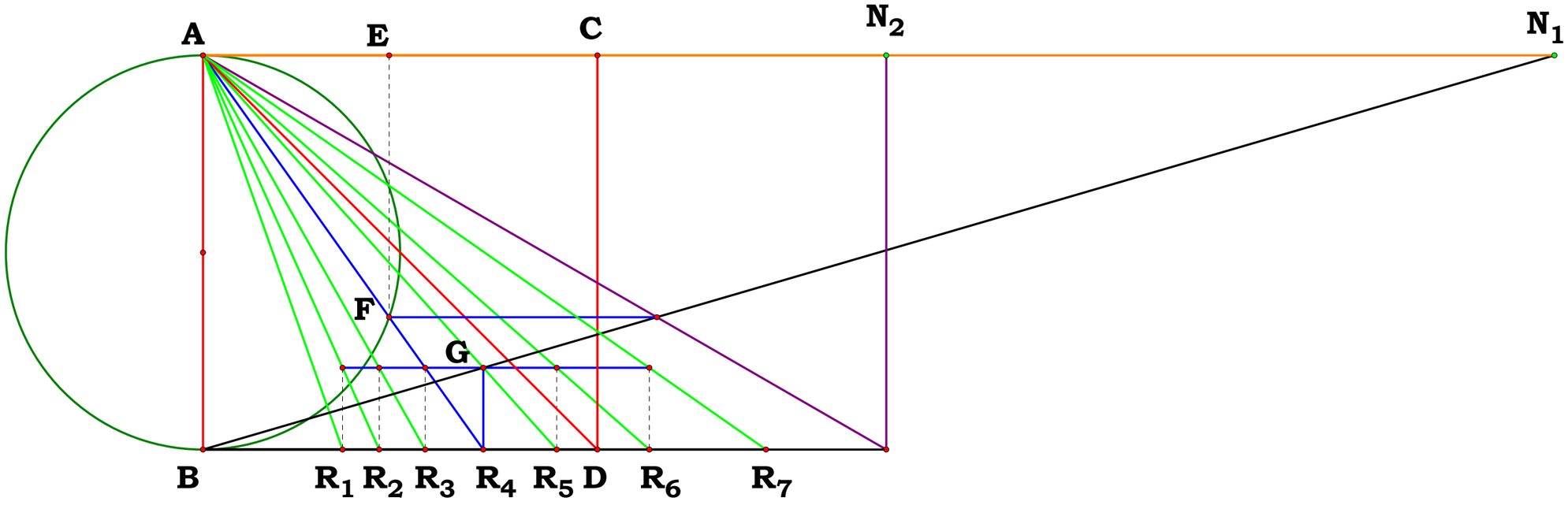
$R_3 = 0.56353$

$R_4 = 0.71101$

$R_5 = 0.89710$

$R_6 = 1.13189$

$R_7 = 1.42814$



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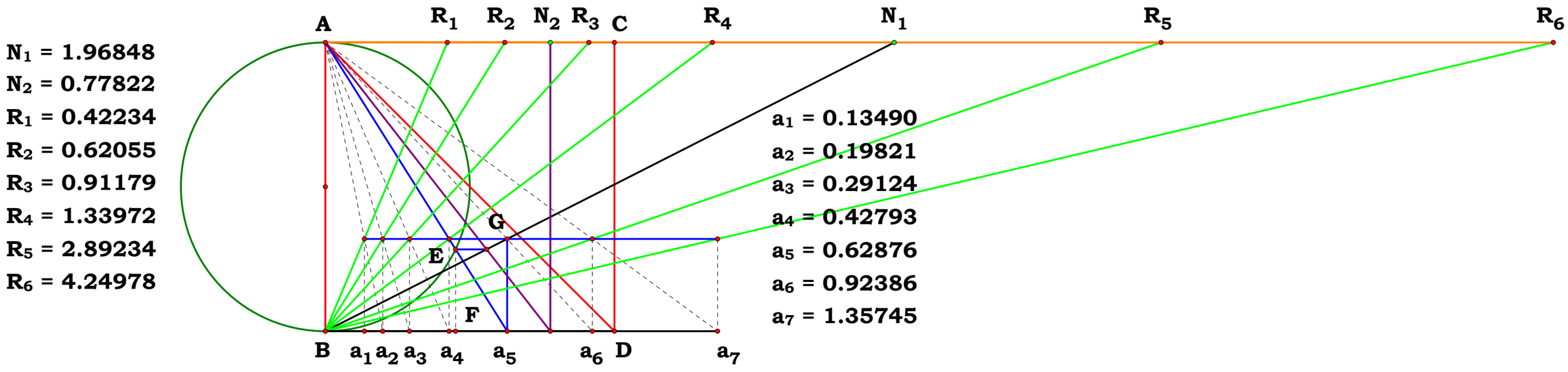
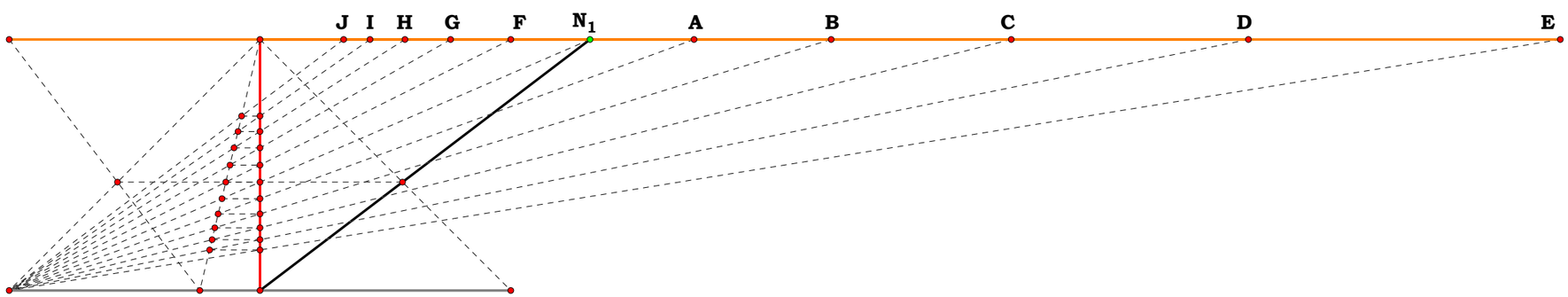
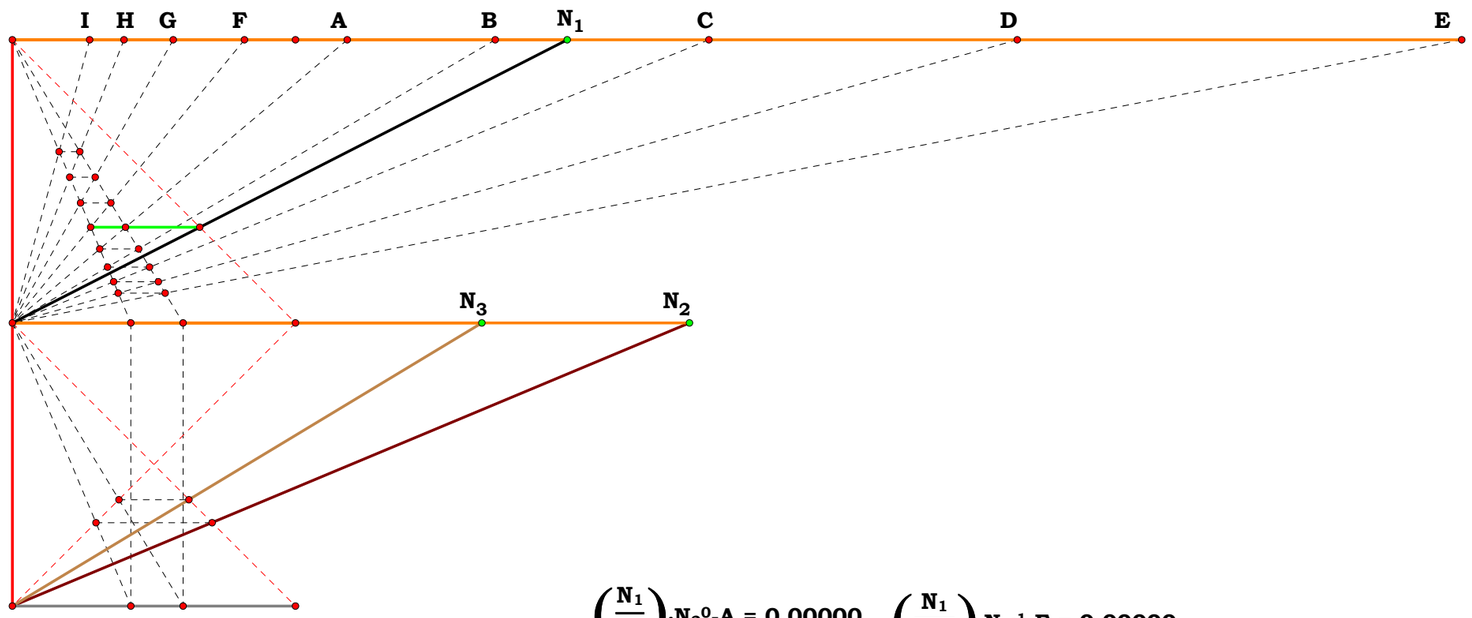




N_1 = 1.31554	A = 1.73065	F = 1.00000	N_1^2-A = 0.00000	N_1^0-F = 0.00000
	B = 2.27675	G = 0.76014	N_1^3-B = 0.00000	N_1^{-1}-G = 0.00000
	C = 2.99516	H = 0.57782	N_1^4-C = 0.00000	N_1^{-2}-H = 0.00000
	D = 3.94026	I = 0.43922	N_1^5-D = 0.00000	N_1^{-3}-I = 0.00000
	E = 5.18358	J = 0.33387	N_1^6-E = 0.00000	N_1^{-4}-J = 0.00000



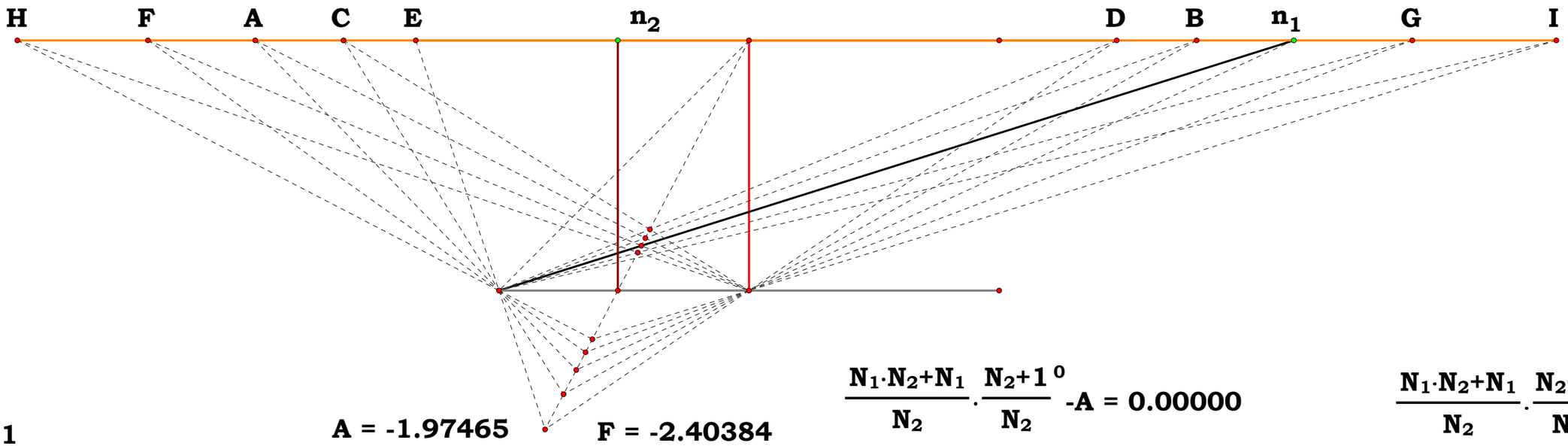
$N_1 = 1.95987$
$N_2 = 2.39124$
$N_3 = 1.65771$

$A = 1.18227$
$B = 1.70541$
$C = 2.46005$
$D = 3.54859$
$E = 5.11881$

$F = 0.81960$
$G = 0.56819$
$H = 0.39389$
$I = 0.27306$

$\left(\frac{N_1}{N_3}\right)\cdot N_2^{0}\text{-}A = 0.00000$
$\left(\frac{N_1}{N_3^{2}}\right)\cdot N_2\text{-}B = 0.00000$
$\left(\frac{N_1}{N_3^{3}}\right)\cdot N_2^{2}\text{-}C = 0.00000$
$\left(\frac{N_1}{N_3^{4}}\right)\cdot N_2^{3}\text{-}D = 0.00000$
$\left(\frac{N_1}{N_3^{5}}\right)\cdot N_2^{4}\text{-}E = 0.00000$

$\left(\frac{N_1}{N_3^{0}}\right)\cdot N_2^{-1}\text{-}F = 0.00000$
$\left(\frac{N_1}{N_3^{-1}}\right)\cdot N_2^{-2}\text{-}G = 0.00000$
$\left(\frac{N_1}{N_3^{-2}}\right)\cdot N_2^{-3}\text{-}H = 0.00000$
$\left(\frac{N_1}{N_3^{-3}}\right)\cdot N_2^{-4}\text{-}I = 0.00000$



$$\frac{N_2+1}{N_2} = -0.90634$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} = -1.97465$$

$N_1 = 2.17870$

$N_2 = -0.52456$

A = -1.97465

B = 1.78970

C = -1.62208

D = 1.47016

E = -1.33247

F = -2.40384

G = 2.65225

H = -2.92632

I = 3.22872

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{0} - A = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{1} - B = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{2} - C = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{3} - D = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{4} - E = 0.00000$$

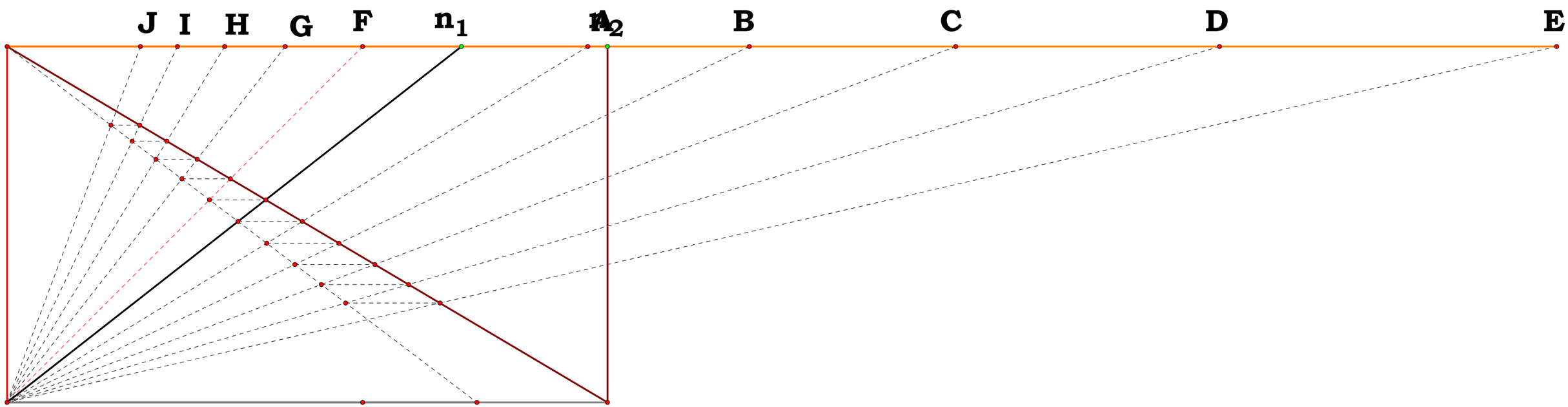
$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-1} - N_1 = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-2} - F = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-3} - G = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-4} - H = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-5} - I = 0.00000$$



$N_1 = 1.27809$

$N_2 = 1.68896$

$A = 1.63353$

$B = 2.08780$

$C = 2.66841$

$D = 3.41048$

$E = 4.35891$

$F = 1.00000$

$G = 0.78241$

$H = 0.61217$

$I = 0.47897$

$J = 0.37476$

$N_1^2\text{-}A = 0.00000$

$N_1^3\text{-}B = 0.00000$

$N_1^4\text{-}C = 0.00000$

$N_1^5\text{-}D = 0.00000$

$N_1^6\text{-}E = 0.00000$

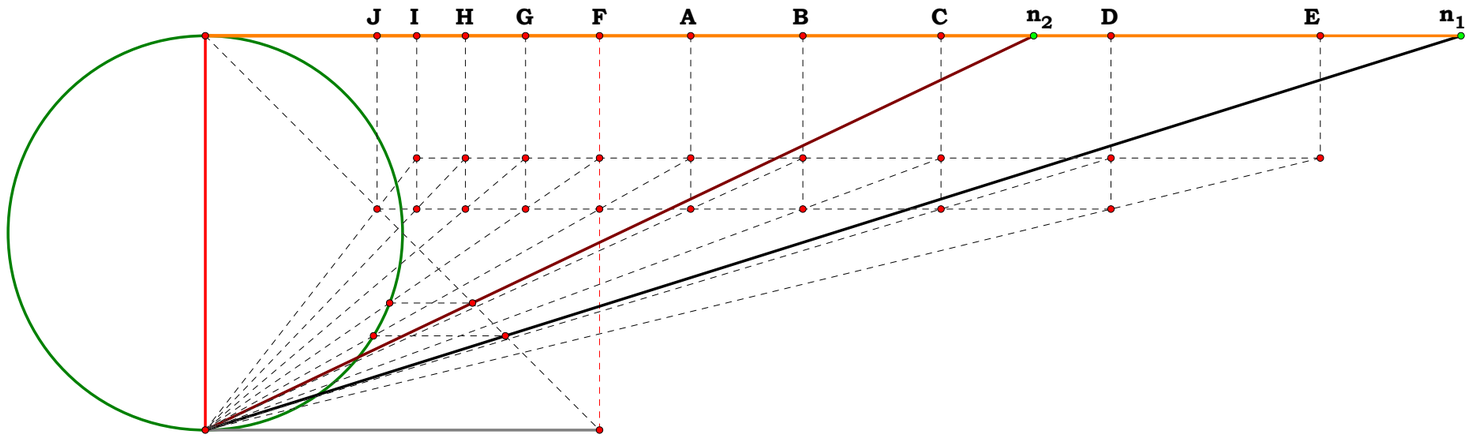
$N_1^0\text{-}F = 0.00000$

$N_1^{-1}\text{-}G = 0.00000$

$N_1^{-2}\text{-}H = 0.00000$

$N_1^{-3}\text{-}I = 0.00000$

$N_1^{-4}\text{-}J = 0.00000$



$\frac{\sqrt{N_1}}{\sqrt{N_2}} = 1.23112$

$N_1 = 3.18458$

$N_2 = 2.10112$

A = 1.23112

B = 1.51566

C = 1.86597

D = 2.29723

E = 2.82817

F = 1.00000

G = 0.81227

H = 0.65978

I = 0.53592

J = 0.43531

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^1$ -A = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^2$ -B = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^3$ -C = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^4$ -D = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^5$ -E = 0.00000

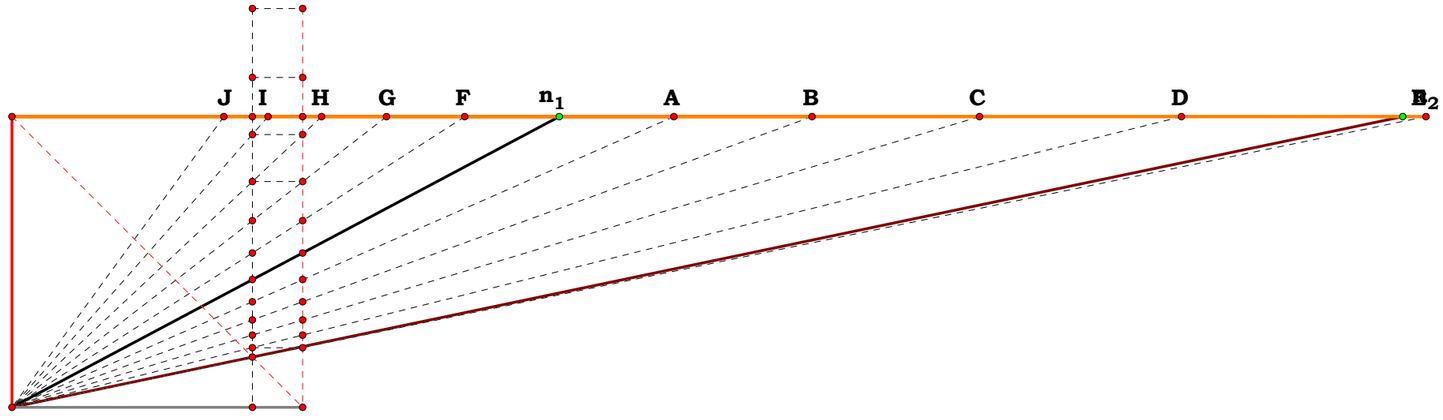
$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^0$ -F = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^{-1}$ -G = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^{-2}$ -H = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^{-3}$ -I = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^{-4}$ -J = 0.00000



$$\frac{N_1 \cdot N_2 + N_1}{N_2} = 2.27629$$

$$\frac{N_2 + 1}{N_2} = 1.20903$$

$N_1 = 1.88273$

$N_2 = 4.78390$

A = 2.27629
B = 2.75211
C = 3.32740
D = 4.02294
E = 4.86387

F = 1.55722
G = 1.28799
H = 1.06530
I = 0.88112
J = 0.72878

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,0}}{N_2} - A = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,1}}{N_2} - B = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,2}}{N_2} - C = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,3}}{N_2} - D = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,4}}{N_2} - E = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-1}}{N_2} - N_1 = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-2}}{N_2} - F = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-3}}{N_2} - G = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-4}}{N_2} - H = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-5}}{N_2} - I = 0.00000$$

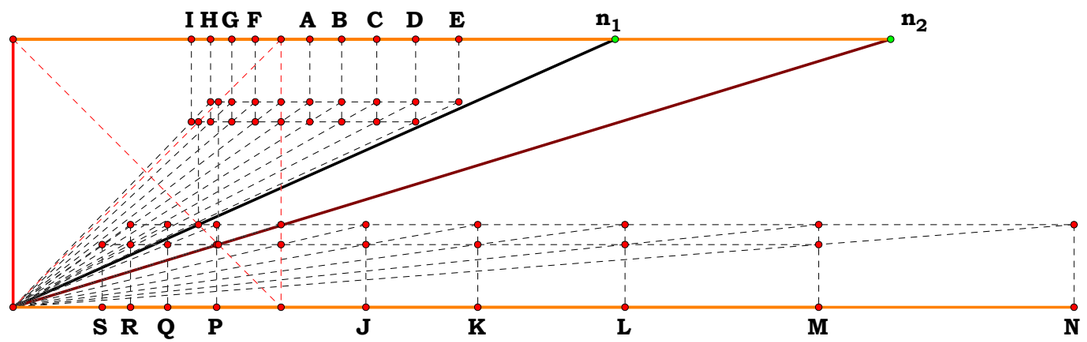
$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-6}}{N_2} - J = 0.00000$$

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)} = 1.10710$$

A = 1.10710
B = 1.22567
C = 1.35694
D = 1.50227
E = 1.66316
F = 0.90326
G = 0.81588
H = 0.73695
I = 0.66566

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{1} - A = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{2} - B = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{3} - C = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{4} - D = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{5} - E = 0.00000$$

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{-1} - F = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{-2} - G = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{-3} - H = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{-4} - I = 0.00000$$



$$\frac{N_2+1}{N_1+1} = 1.31677$$

N_1 = 2.24615
N_2 = 3.27442

J = 1.31677
K = 1.73387
L = 2.28310
M = 3.00631
N = 3.95861

P = 0.75944
Q = 0.57674
R = 0.43800
S = 0.33263

$$\frac{N_2+1}{N_1+1}^{1} - J = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{2} - K = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{3} - L = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{4} - M = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{5} - N = 0.00000$$

$$\frac{N_2+1}{N_1+1}^{-1} - P = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{-2} - Q = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{-3} - R = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{-4} - S = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2} = 0.83725$$

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot N_2+N_1} = 1.12397$$

A = 0.83725
B = 0.94105
C = 1.05771
D = 1.18884
E = 1.33622

F = 0.74490
G = 0.66274
H = 0.58964
I = 0.52461

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{0}}{N_1\cdot N_2+N_1} - A = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{1}}{N_1\cdot N_2+N_1} - B = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{2}}{N_1\cdot N_2+N_1} - C = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{3}}{N_1\cdot N_2+N_1} - D = 0.00000$$

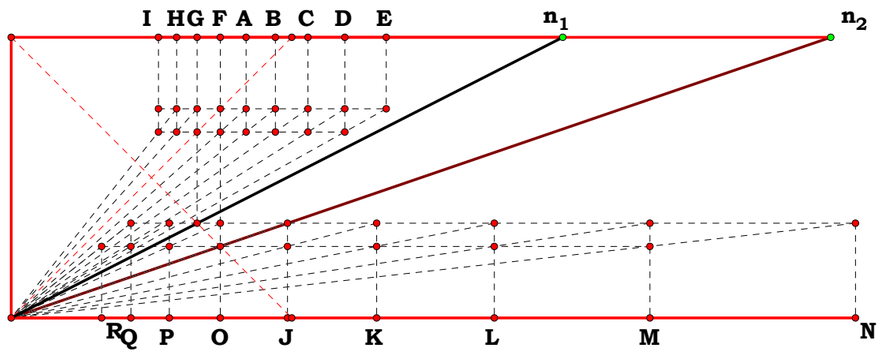
$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{4}}{N_1\cdot N_2+N_1} - E = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-1}}{N_1\cdot N_2+N_1} - F = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-2}}{N_1\cdot N_2+N_1} - G = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-3}}{N_1\cdot N_2+N_1} - H = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-4}}{N_1\cdot N_2+N_1} - I = 0.00000$$



$$\frac{N_2}{N_1+1} = 0.98482$$

$$\frac{N_2+1}{N_1+1} = 1.32208$$

N_1 = 1.96510
N_2 = 2.92011

J = 0.98482
K = 1.30202
L = 1.72138
M = 2.27580
N = 3.00879

O = 0.74490
P = 0.56343
Q = 0.42617
R = 0.32235

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{0}}{N_1+1} - J = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{1}}{N_1+1} - K = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{2}}{N_1+1} - L = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{3}}{N_1+1} - M = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{4}}{N_1+1} - N = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-1}}{N_1+1} - O = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-2}}{N_1+1} - P = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-3}}{N_1+1} - Q = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-4}}{N_1+1} - R = 0.00000$$

B = 1.31080
C = 1.71820
D = 2.25222
E = 2.95221
F = 3.86977
G = 5.07250

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)} = 1.31080 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{1} - B = 0.00000$$

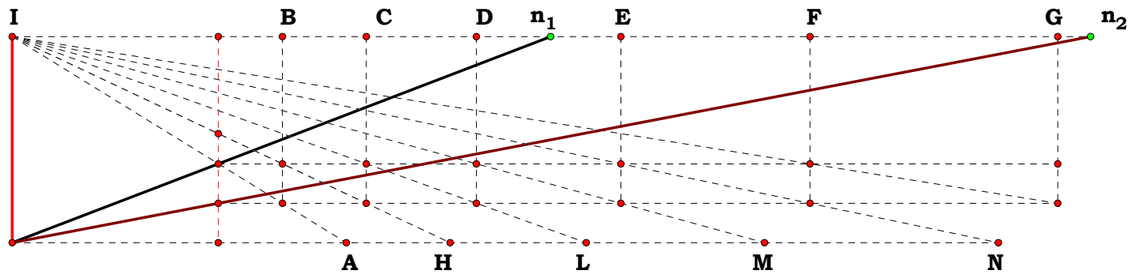
$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2} = 1.71820 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2} - C = 0.00000$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3} = 2.25222 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3} - D = 0.00000$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{4} = 2.95221 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{4} - E = 0.00000$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{5} = 3.86977 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{5} - F = 0.00000$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{6} = 5.07250 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{6} - G = 0.00000$$



$$\frac{N_1}{N_1-1} - A = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2} = 2.12423$$

N_1 = 2.61146
N_2 = 5.23175

A = 1.62056
H = 2.12423
L = 2.78444
M = 3.64985
N = 4.78423

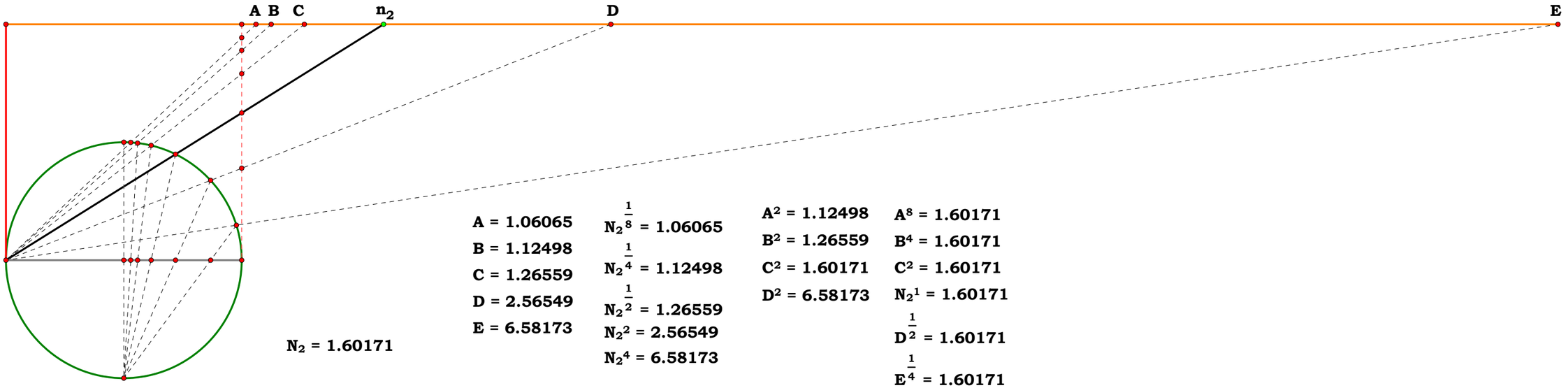
$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{-1} = 1.62056 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{-1}\right) - A = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{0} = 2.12423 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{0}\right) - H = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{1} = 2.78444 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{1}\right) - L = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2} = 3.64985 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2}\right) - M = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3} = 4.78423 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3}\right) - N = 0.00000$$



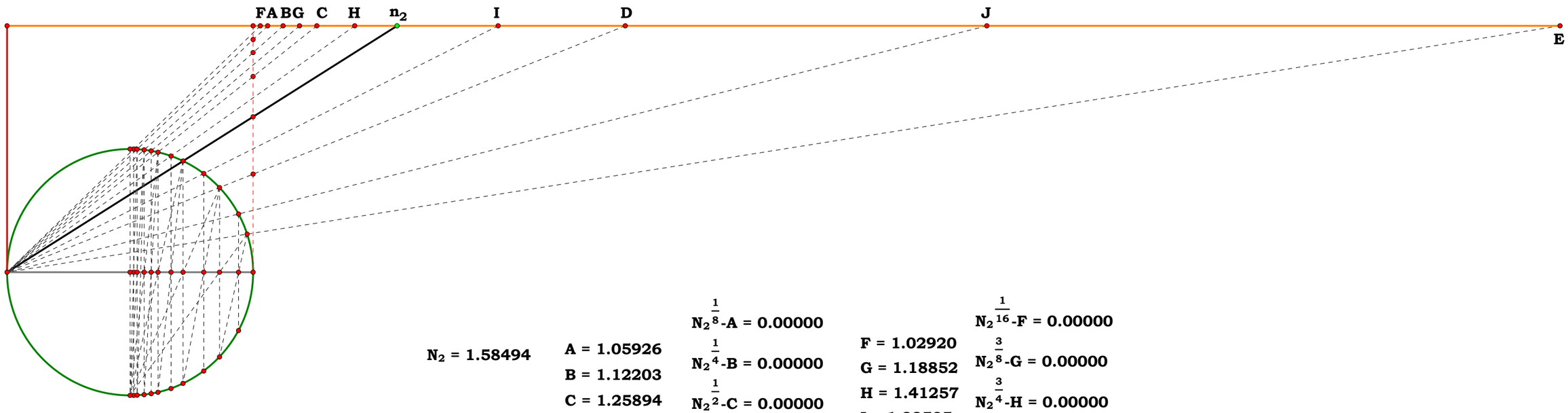
$N_2 = 1.60171$

$A = 1.06065$
$B = 1.12498$
$C = 1.26559$
$D = 2.56549$
$E = 6.58173$

$N_2^{\frac{1}{8}} = 1.06065$
$N_2^{\frac{1}{4}} = 1.12498$
$N_2^{\frac{1}{2}} = 1.26559$
$N_2^{2} = 2.56549$
$N_2^{4} = 6.58173$

$A^2 = 1.12498$
$B^2 = 1.26559$
$C^2 = 1.60171$
$D^2 = 6.58173$

$A^8 = 1.60171$
$B^4 = 1.60171$
$C^2 = 1.60171$
$N_2^{1} = 1.60171$
$D^{\frac{1}{2}} = 1.60171$
$E^{\frac{1}{4}} = 1.60171$



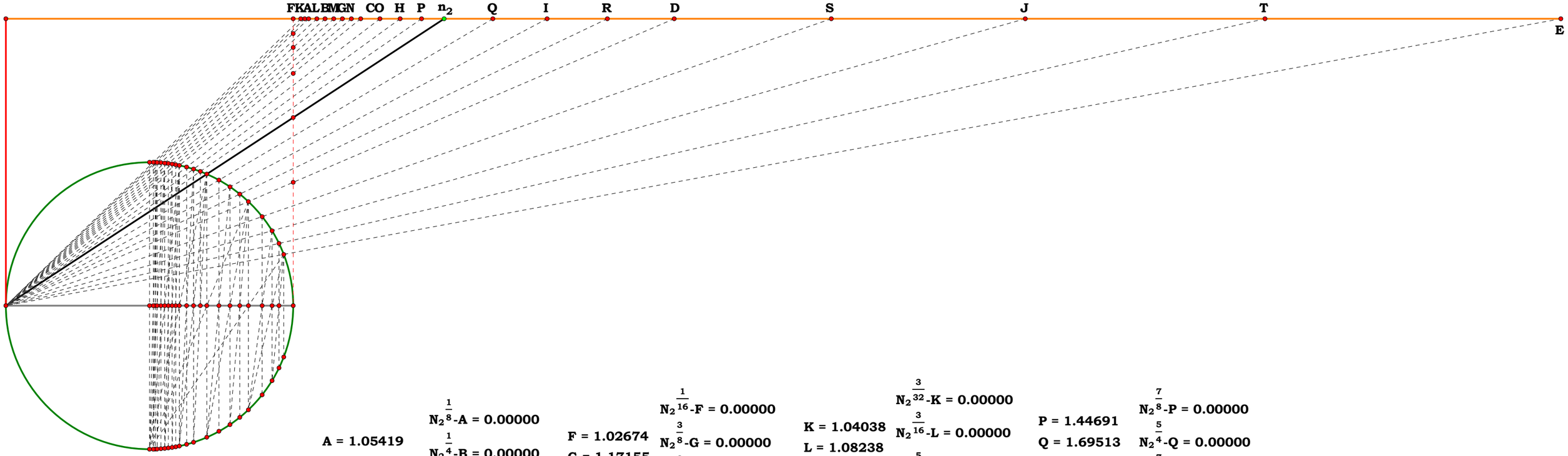
$N_2 = 1.58494$

$A = 1.05926$
$B = 1.12203$
$C = 1.25894$
$D = 2.51204$
$E = 6.31034$

$N_2^{\frac{1}{8}}\text{-}A = 0.00000$
$N_2^{\frac{1}{4}}\text{-}B = 0.00000$
$N_2^{\frac{1}{2}}\text{-}C = 0.00000$
$N_2^{2}\text{-}D = 0.00000$
$N_2^{4}\text{-}E = 0.00000$

$F = 1.02920$
$G = 1.18852$
$H = 1.41257$
$I = 1.99535$
$J = 3.98144$

$N_2^{\frac{1}{16}}\text{-}F = 0.00000$
$N_2^{\frac{3}{8}}\text{-}G = 0.00000$
$N_2^{\frac{3}{4}}\text{-}H = 0.00000$
$N_2^{\frac{3}{2}}\text{-}I = 0.00000$
$N_2^{3}\text{-}J = 0.00000$



$N_2 = 1.52533$

A = 1.05419
B = 1.11132
C = 1.23504
D = 2.32662
E = 5.41318

$N_2^{\frac{1}{8}}$-A = 0.00000
$N_2^{\frac{1}{4}}$-B = 0.00000
$N_2^{\frac{1}{2}}$-C = 0.00000
N_2^{2}-D = 0.00000
N_2^{4}-E = 0.00000

F = 1.02674
G = 1.17155
H = 1.37253
I = 1.88384
J = 3.54886

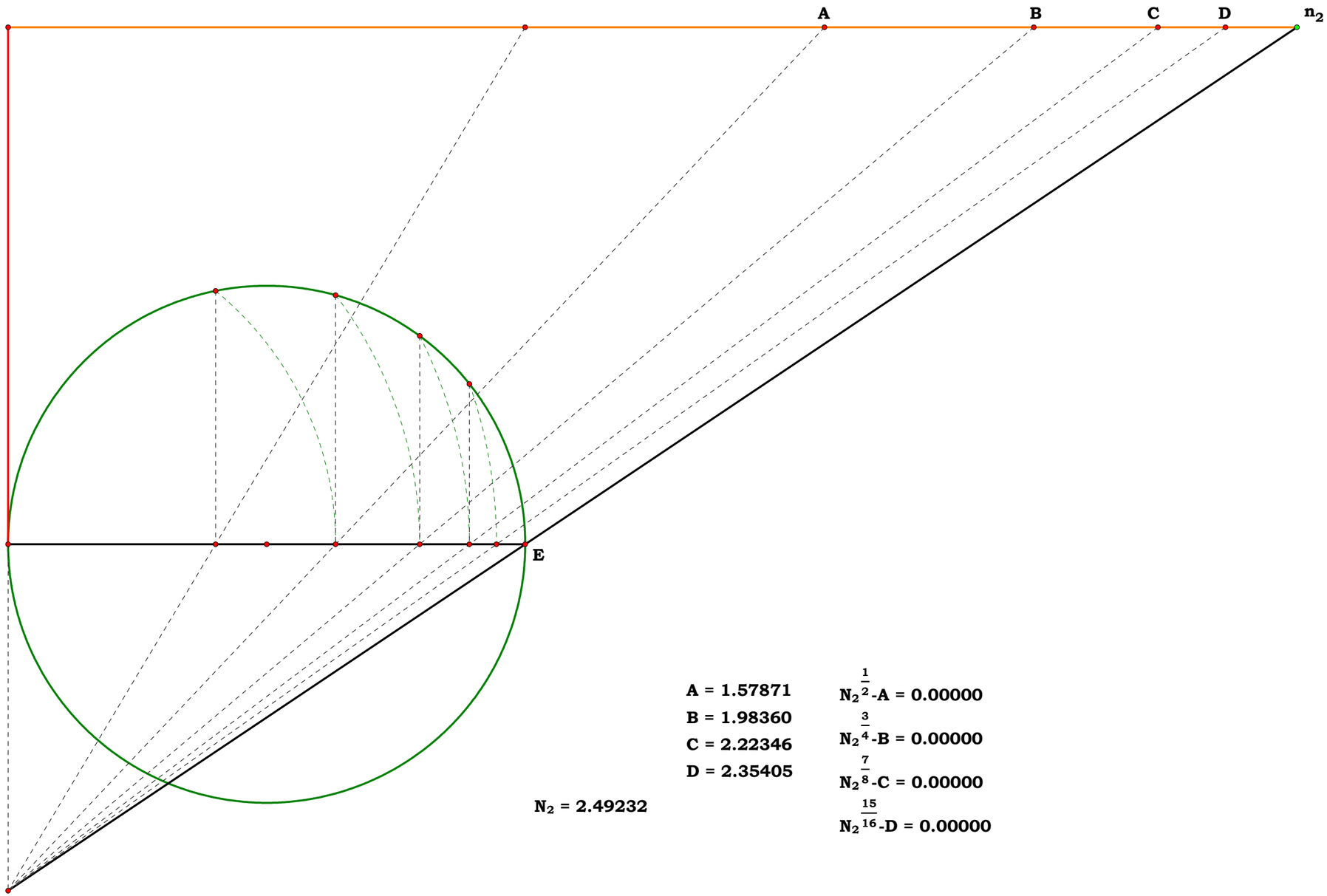
$N_2^{\frac{1}{16}}$-F = 0.00000
$N_2^{\frac{3}{8}}$-G = 0.00000
$N_2^{\frac{3}{4}}$-H = 0.00000
$N_2^{\frac{3}{2}}$-I = 0.00000
N_2^{3}-J = 0.00000

K = 1.04038
L = 1.08238
M = 1.14104
N = 1.20288
O = 1.30197

$N_2^{\frac{3}{32}}$-K = 0.00000
$N_2^{\frac{3}{16}}$-L = 0.00000
$N_2^{\frac{5}{16}}$-M = 0.00000
$N_2^{\frac{7}{16}}$-N = 0.00000
$N_2^{\frac{5}{8}}$-O = 0.00000

P = 1.44691
Q = 1.69513
R = 2.09356
S = 2.87348
T = 4.38299

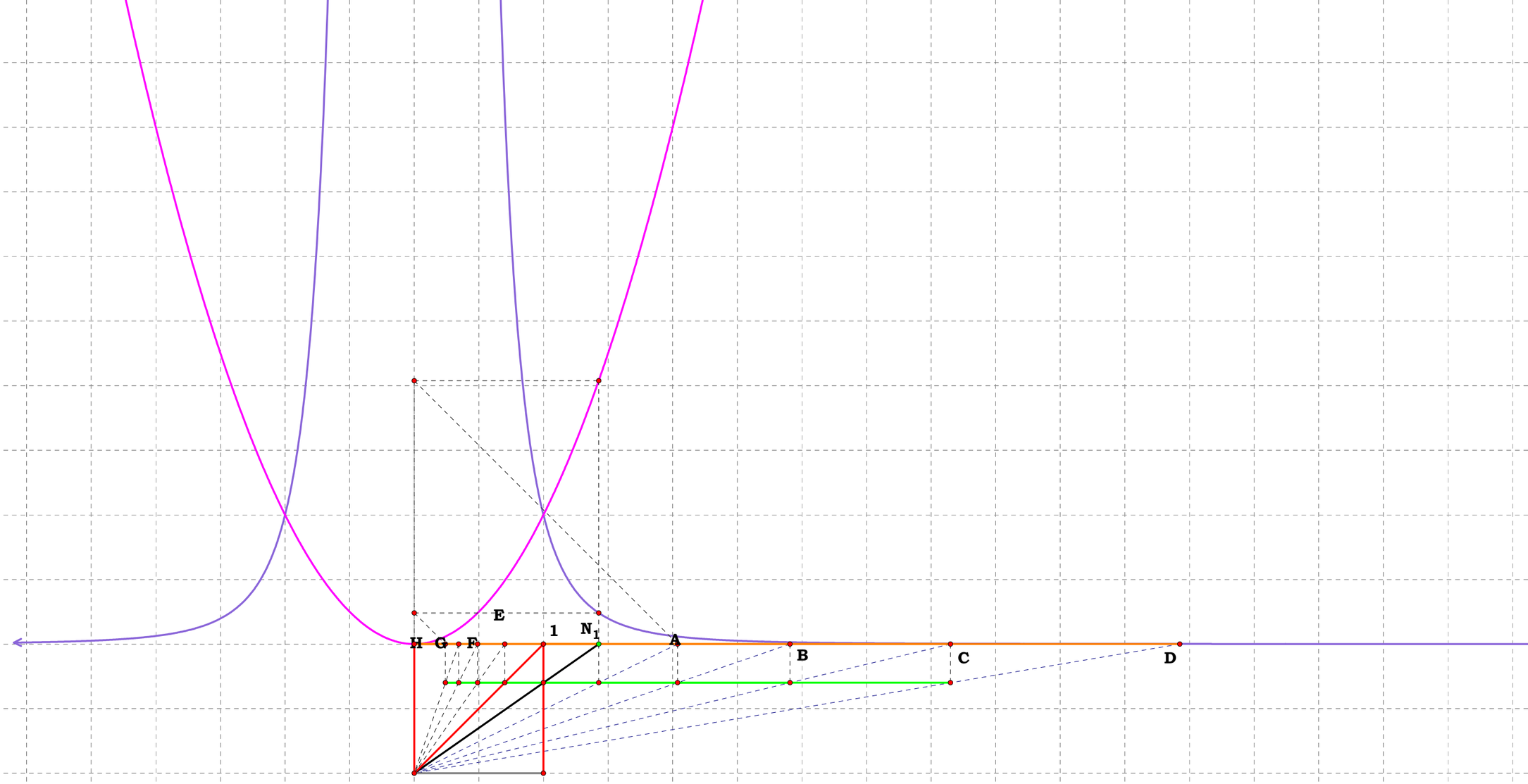
$N_2^{\frac{7}{8}}$-P = 0.00000
$N_2^{\frac{5}{4}}$-Q = 0.00000
$N_2^{\frac{7}{4}}$-R = 0.00000
$N_2^{\frac{5}{2}}$-S = 0.00000
$N_2^{\frac{7}{2}}$-T = 0.00000



A = 1.57871
B = 1.98360
C = 2.22346
D = 2.35405

N_2 = 2.49232

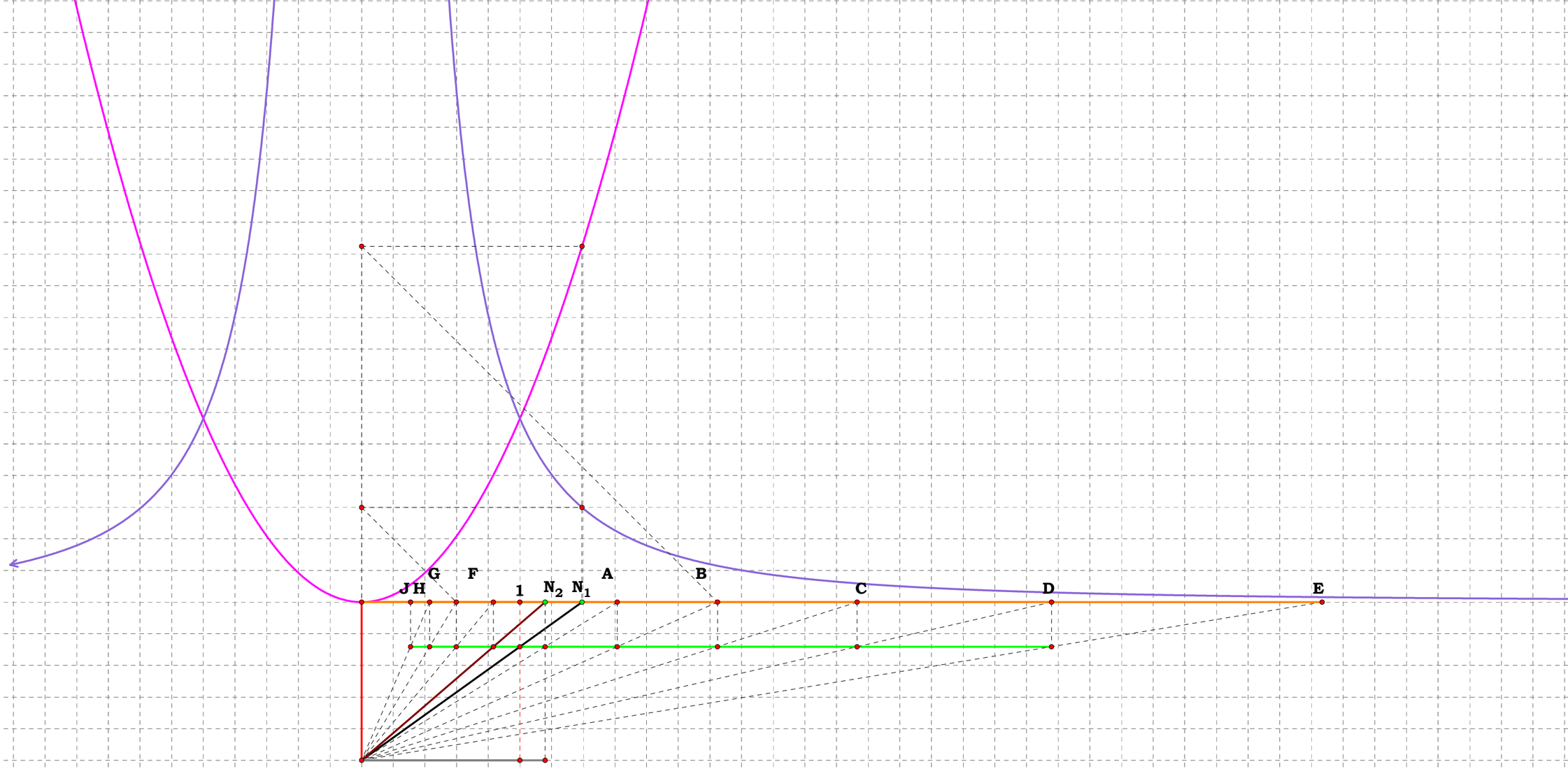
$N_2^{\frac{1}{2}}$-A = 0.00000
$N_2^{\frac{3}{4}}$-B = 0.00000
$N_2^{\frac{7}{8}}$-C = 0.00000
$N_2^{\frac{15}{16}}$-D = 0.00000



N_1 = 1.42736

A = 2.03735	N_1^2-A = 0.00000	N_1^{-1}-E = 0.00000
B = 2.90803	N_1^3-B = 0.00000	N_1^{-2}-F = 0.00000
C = 4.15079	N_1^4-C = 0.00000	N_1^{-3}-G = 0.00000
D = 5.92467	N_1^5-D = 0.00000	N_1^{-4}-H = 0.00000
E = 0.70060		
F = 0.49083		
G = 0.34388		
H = 0.24092		

Plate 1



N_1 = 1.39234

N_2 = 1.15968

A = 1.61466

B = 2.24815

C = 3.13018

D = 4.35827

E = 6.06818

F = 0.83290

G = 0.59820

H = 0.42964

J = 0.30857

$N_2 \cdot N_1^{1} - A = 0.00000$

$N_2 \cdot N_1^{2} - B = 0.00000$

$N_2 \cdot N_1^{3} - C = 0.00000$

$N_2 \cdot N_1^{4} - D = 0.00000$

$N_2 \cdot N_1^{5} - E = 0.00000$

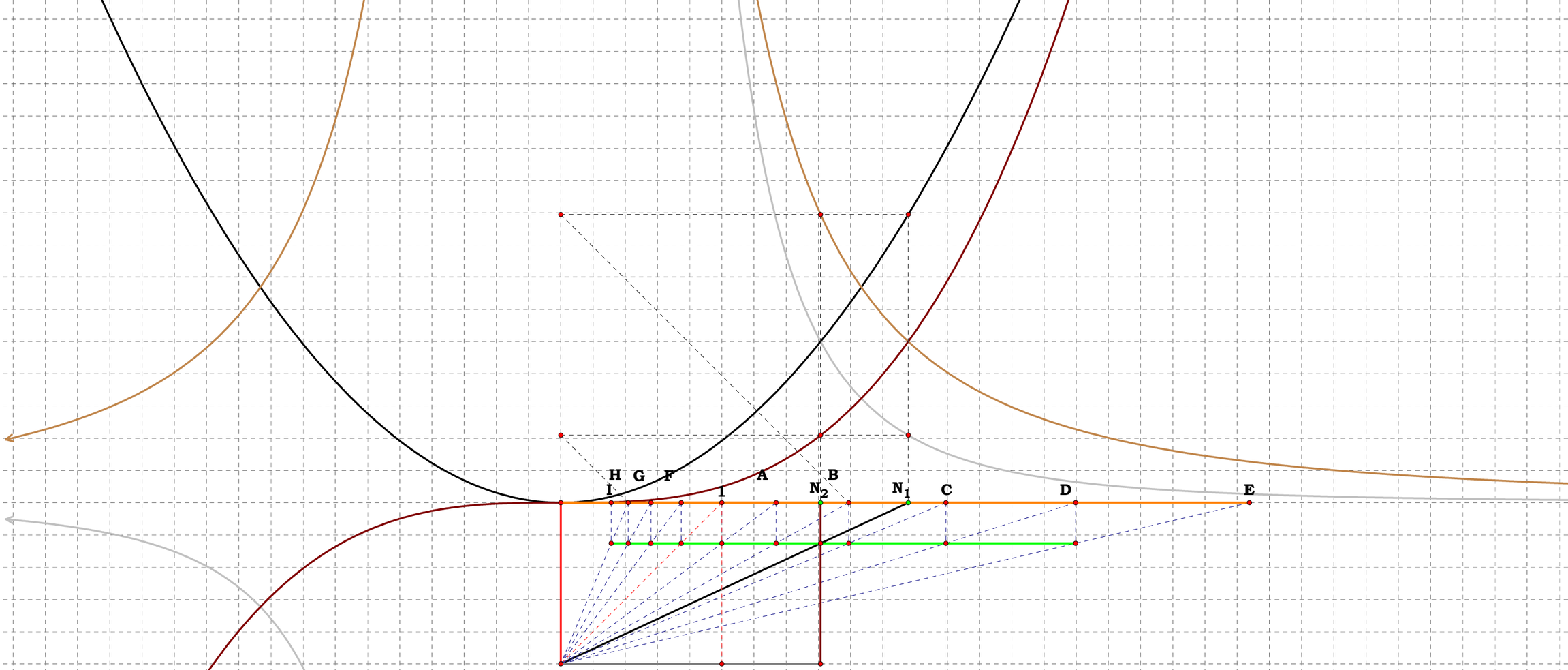
$N_2 \cdot N_1^{-1} - F = 0.00000$

$N_2 \cdot N_1^{-2} - G = 0.00000$

$N_2 \cdot N_1^{-3} - H = 0.00000$

$N_2 \cdot N_1^{-4} - J = 0.00000$

Plate 2



$N_1 = 2.15726$

$N_2 = 1.61326$

$\frac{N_1}{N_2} = 1.33720$

A = 1.33720

B = 1.78811

C = 2.39107

D = 3.19734

E = 4.27549

F = 0.74783

G = 0.55925

H = 0.41822

I = 0.31276

$\frac{N_1^{\,1}}{N_2}$ -A = 0.00000

$\frac{N_1^{\,2}}{N_2}$ -B = 0.00000

$\frac{N_1^{\,3}}{N_2}$ -C = 0.00000

$\frac{N_1^{\,4}}{N_2}$ -D = 0.00000

$\frac{N_1^{\,5}}{N_2}$ -E = 0.00000

$\frac{N_1^{\,-1}}{N_2}$ -F = 0.00000

$\frac{N_1^{\,-2}}{N_2}$ -G = 0.00000

$\frac{N_1^{\,-3}}{N_2}$ -H = 0.00000

$\frac{N_1^{\,-4}}{N_2}$ -I = 0.00000

Plate 3

$\frac{N_1}{N_2}$-A = 0.00000

$\frac{N_1^{\,2}}{N_2^{\,2}}$-B = 0.00000

$\frac{N_1^{\,3}}{N_2^{\,3}}$-C = 0.00000

$\frac{N_1^{\,4}}{N_2^{\,4}}$-D = 0.00000

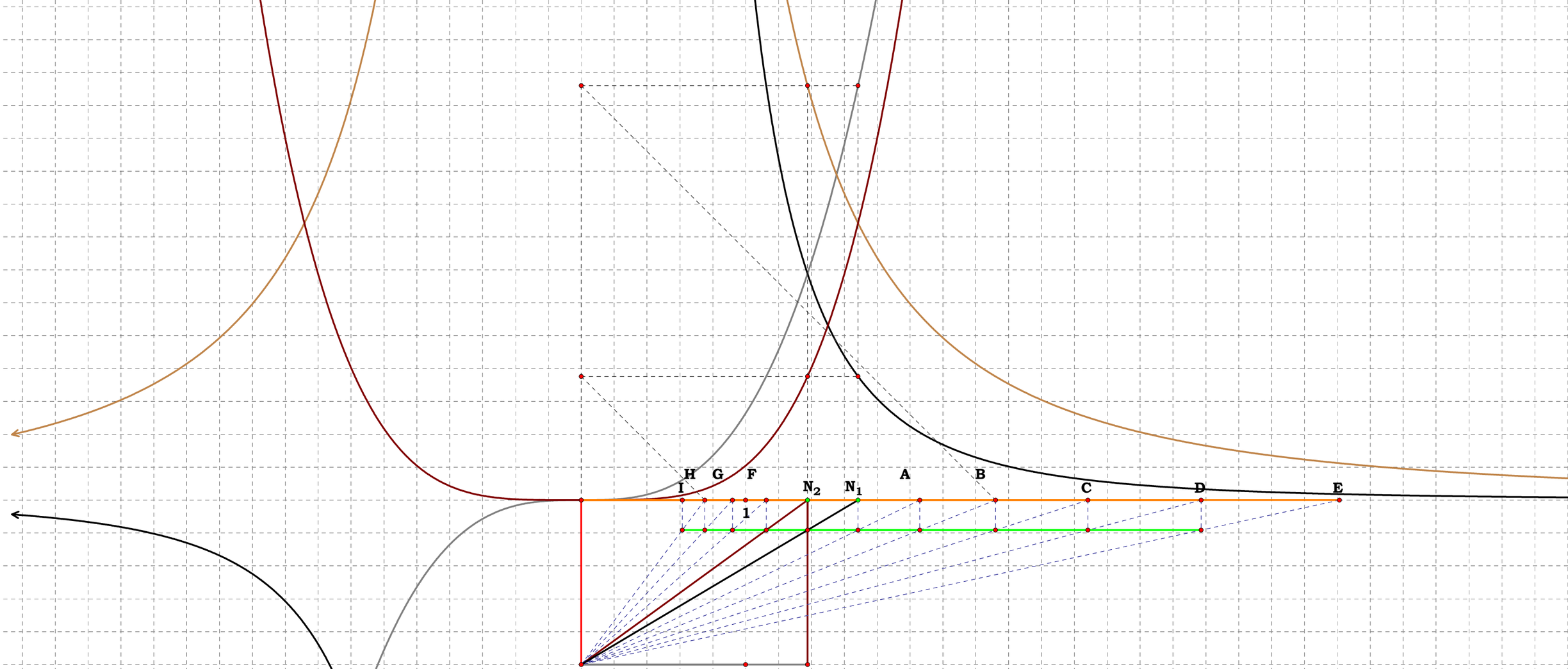
$\frac{N_1^{\,5}}{N_2^{\,5}}$-E = 0.00000

$\frac{N_2^{\,4}}{N_1^{\,4}}$-I = 0.00000

$\frac{N_2^{\,3}}{N_1^{\,3}}$-H = 0.00000

$\frac{N_2^{\,2}}{N_1^{\,2}}$-G = 0.00000

$\frac{N_2}{N_1}$-F = 0.00000



$N_1 = 1.68394$

$N_2 = 1.37660$

$\frac{N_1}{N_2} = 1.22326$

A = 2.05989

B = 2.51977

C = 3.08233

D = 3.77048

E = 4.61226

F = 1.12536

G = 0.91997

H = 0.75207

I = 0.61481

$N_1 \cdot \frac{N_1^{\,1}}{N_2} - A = 0.00000$

$N_1 \cdot \frac{N_1^{\,2}}{N_2} - B = 0.00000$

$N_1 \cdot \frac{N_1^{\,3}}{N_2} - C = 0.00000$

$N_1 \cdot \frac{N_1^{\,4}}{N_2} - D = 0.00000$

$N_1 \cdot \frac{N_1^{\,5}}{N_2} - E = 0.00000$

$N_1 \cdot \frac{N_1^{\,-1}}{N_2} - N_2 = 0.00000$

$N_1 \cdot \frac{N_1^{\,-2}}{N_2} - F = 0.00000$

$N_1 \cdot \frac{N_1^{\,-3}}{N_2} - G = 0.00000$

$N_1 \cdot \frac{N_1^{\,-4}}{N_2} - H = 0.00000$

$N_1 \cdot \frac{N_1^{\,-5}}{N_2} - I = 0.00000$

$\frac{N_1^{\,2}}{N_2} - A = 0.00000$

$\frac{N_1^{\,3}}{N_2^{\,2}} - B = 0.00000$

$\frac{N_1^{\,4}}{N_2^{\,3}} - C = 0.00000$

$\frac{N_1^{\,5}}{N_2^{\,4}} - D = 0.00000$

$\frac{N_1^{\,6}}{N_2^{\,5}} - E = 0.00000$

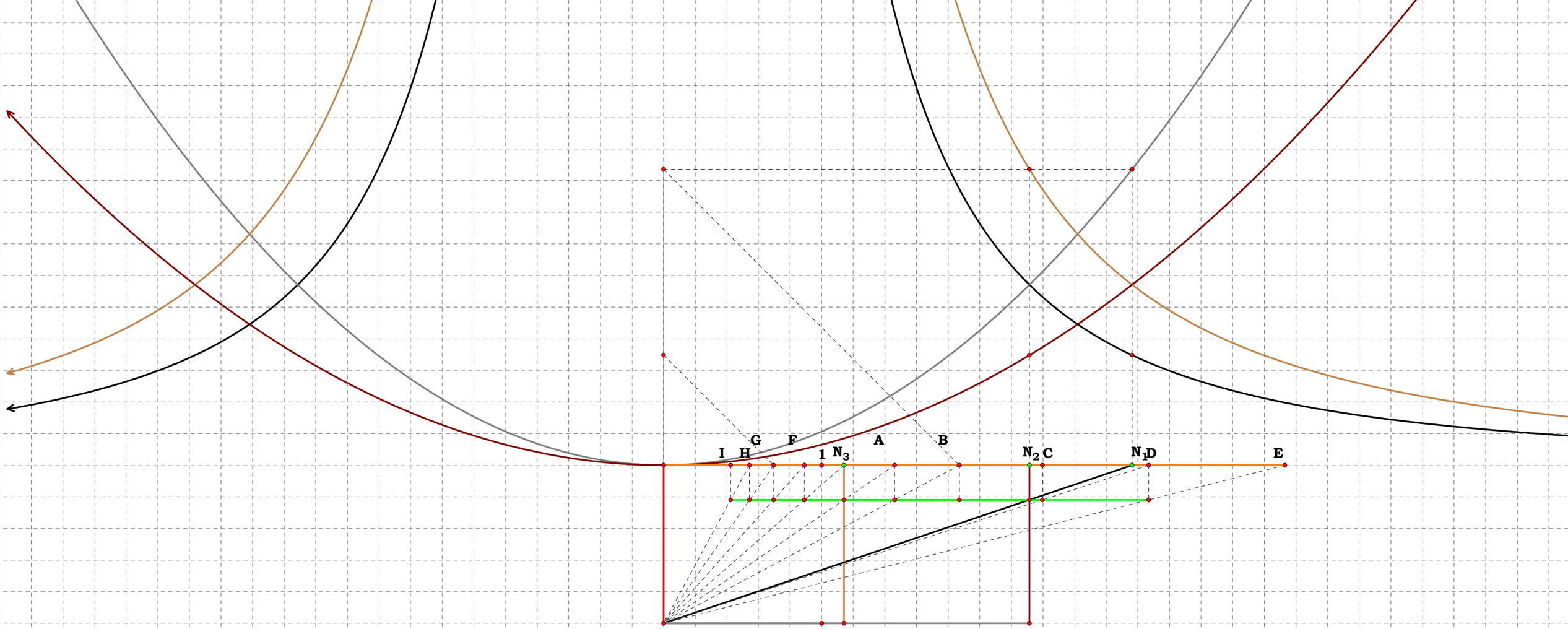
$\frac{N_2^{\,5}}{N_1^{\,4}} - I = 0.00000$

$\frac{N_2^{\,4}}{N_1^{\,3}} - H = 0.00000$

$\frac{N_2^{\,3}}{N_1^{\,2}} - G = 0.00000$

$\frac{N_2^{\,2}}{N_1} - F = 0.00000$

Plate 4



$N_1 = 2.96382$

$N_2 = 2.31441$

$N_3 = 1.14115$

$\frac{N_1}{N_2} = 1.28059$

A = 1.46135

B = 1.87140

C = 2.39649

D = 3.06893

E = 3.93005

F = 0.89111

G = 0.69586

H = 0.54339

I = 0.42433

$N_3 \cdot \frac{N_1^{\,1}}{N_2}$ -A = 0.00000

$N_3 \cdot \frac{N_1^{\,2}}{N_2}$ -B = 0.00000

$N_3 \cdot \frac{N_1^{\,3}}{N_2}$ -C = 0.00000

$N_3 \cdot \frac{N_1^{\,4}}{N_2}$ -D = 0.00000

$N_3 \cdot \frac{N_1^{\,5}}{N_2}$ -E = 0.00000

$N_3 \cdot \frac{N_1^{\,-1}}{N_2}$ -F = 0.00000

$N_3 \cdot \frac{N_1^{\,-2}}{N_2}$ -G = 0.00000

$N_3 \cdot \frac{N_1^{\,-3}}{N_2}$ -H = 0.00000

$N_3 \cdot \frac{N_1^{\,-4}}{N_2}$ -I = 0.00000

Plate 5

$\frac{N_1 \cdot N_3}{N_2}$ -A = 0.00000

$\frac{N_1^{\,2} \cdot N_3}{N_2^{\,2}}$ -B = 0.00000

$\frac{N_1^{\,3} \cdot N_3}{N_2^{\,3}}$ -C = 0.00000

$\frac{N_1^{\,4} \cdot N_3}{N_2^{\,4}}$ -D = 0.00000

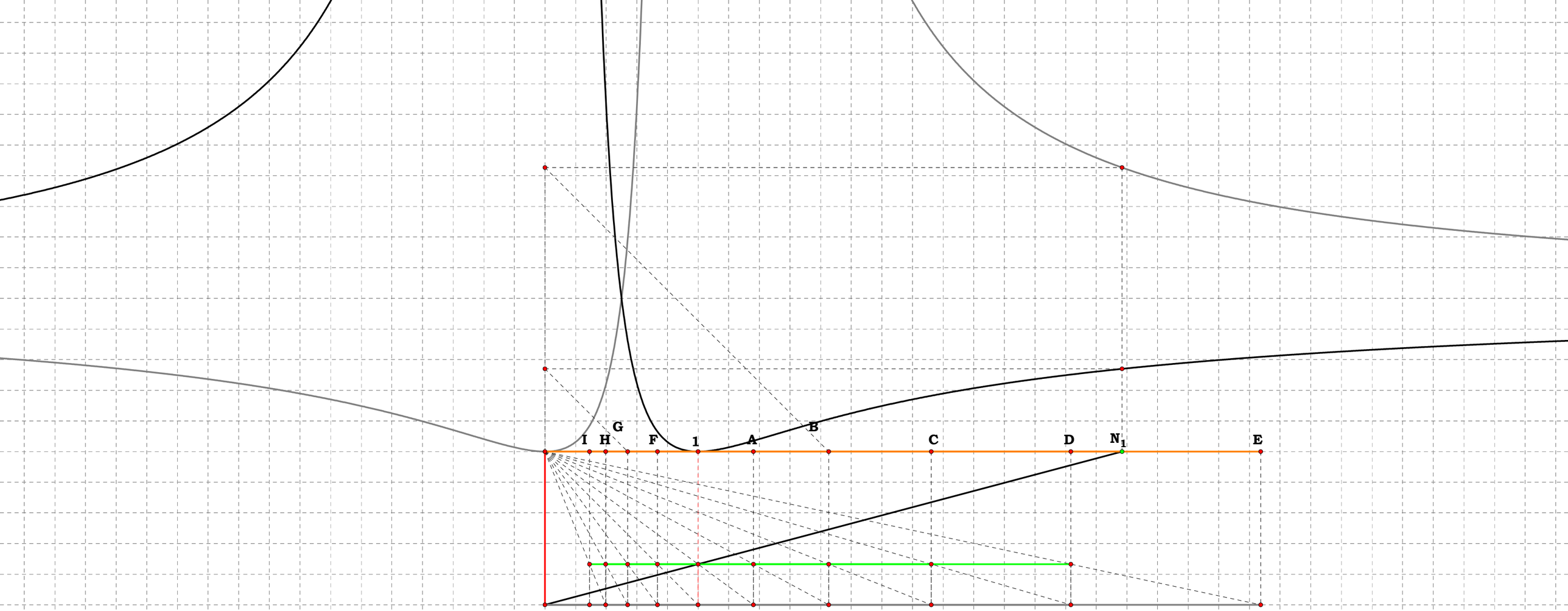
$\frac{N_1^{\,5} \cdot N_3}{N_2^{\,5}}$ -E = 0.00000

$\frac{N_2^{\,4} \cdot N_3}{N_1^{\,4}}$ -I = 0.00000

$\frac{N_2^{\,3} \cdot N_3}{N_1^{\,3}}$ -H = 0.00000

$\frac{N_2^{\,2} \cdot N_3}{N_1^{\,2}}$ -G = 0.00000

$\frac{N_2 \cdot N_3}{N_1}$ -F = 0.00000



$N_1 = 3.76827$

$\frac{N_1}{N_1-1} = 1.36124$

A = 1.36124
B = 1.85297
C = 2.52232
D = 3.43348
E = 4.67378
F = 0.73463
G = 0.53968
H = 0.39646
I = 0.29125

$\frac{N_1^{\,1}}{N_1-1}$ -A = 0.00000

$\frac{N_1^{\,2}}{N_1-1}$ -B = 0.00000

$\frac{N_1^{\,3}}{N_1-1}$ -C = 0.00000

$\frac{N_1^{\,4}}{N_1-1}$ -D = 0.00000

$\frac{N_1^{\,5}}{N_1-1}$ -E = 0.00000

$\frac{N_1^{\,-1}}{N_1-1}$ -F = 0.00000

$\frac{N_1^{\,-2}}{N_1-1}$ -G = 0.00000

$\frac{N_1^{\,-3}}{N_1-1}$ -H = 0.00000

$\frac{N_1^{\,-4}}{N_1-1}$ -I = 0.00000

Plate 6

$\frac{N_1}{N_1-1}$ -A = 0.00000

$\frac{N_1^2}{(N_1^2-2\cdot N_1)+1}$ -B = 0.00000

$\frac{N_1^3}{((N_1^3-3\cdot N_1^2)+3\cdot N_1)-1}$ -C = 0.00000

$\frac{N_1^4}{(((N_1^4-4\cdot N_1^3)+6\cdot N_1^2)-4\cdot N_1)+1}$ -D = 0.00000

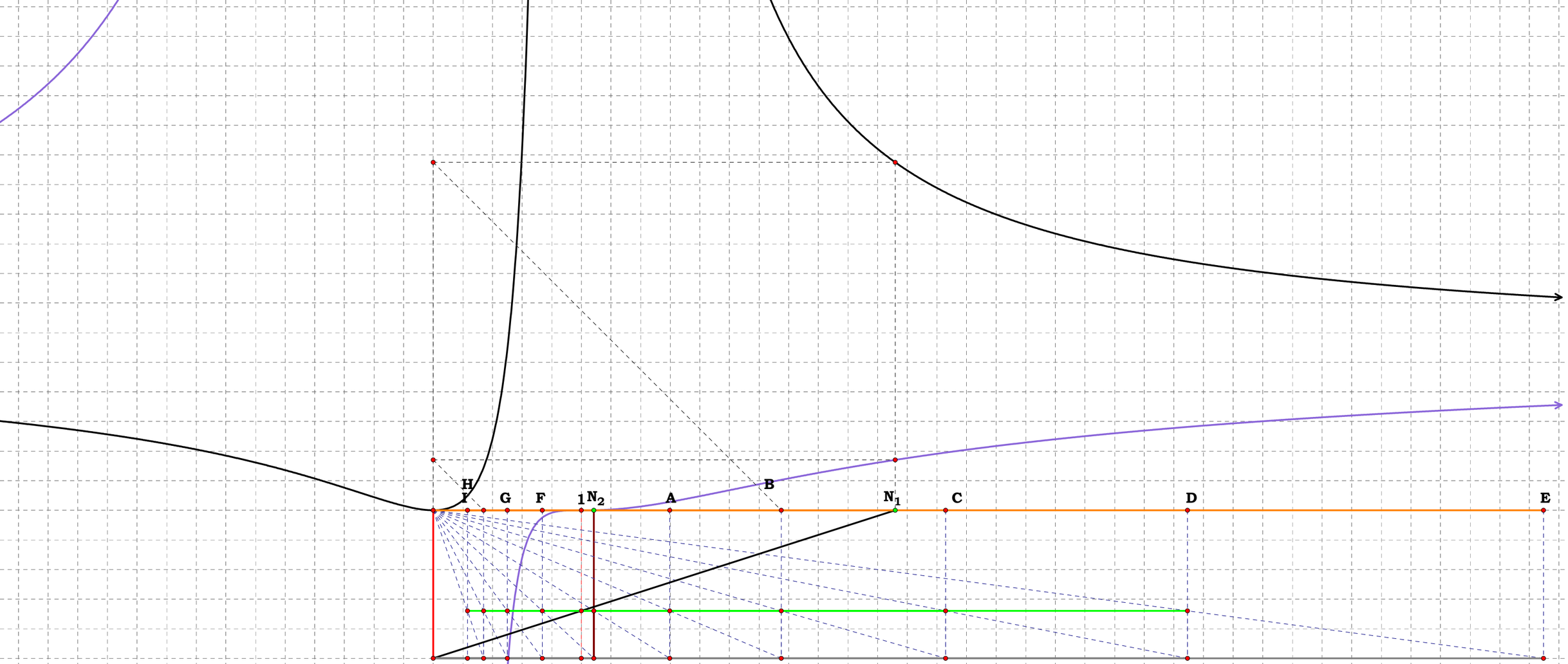
$\frac{N_1^5}{((((N_1^5-5\cdot N_1^4)+10\cdot N_1^3)-10\cdot N_1^2)+5\cdot N_1)-1}$ -E = 0.00000

$\frac{(((N_1^4-4\cdot N_1^3)+6\cdot N_1^2)-4\cdot N_1)+1}{N_1^4}$ -I = 0.00000

$\frac{((N_1^3-3\cdot N_1^2)+3\cdot N_1)-1}{N_1^3}$ -H = 0.00000

$\frac{(N_1^2-2\cdot N_1)+1}{N_1^2}$ -G = 0.00000

$\frac{N_1-1}{N_1}$ -F = 0.00000



$N_1 = 3.11876$

$N_2 = 1.08464$

$\frac{N_1}{N_1-1} = 1.47197$

$A = 1.59656$

$B = 2.35009$

$C = 3.45928$

$D = 5.09196$

$E = 7.49523$

$F = 0.73686$

$G = 0.50059$

$H = 0.34008$

$I = 0.23104$

$N_2 \cdot \frac{N_1}{N_1-1}^{1} - A = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{2} - B = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{3} - C = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{4} - D = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{5} - E = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{-1} - F = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{-2} - G = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{-3} - H = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{-4} - I = 0.00000$

Plate 7

$\frac{N_1 \cdot N_2}{N_1-1} - A = 0.00000$

$\frac{N_1^2 \cdot N_2}{(N_1^2-2 \cdot N_1)+1} - B = 0.00000$

$\frac{N_1^3 \cdot N_2}{((N_1^3-3 \cdot N_1^2)+3 \cdot N_1)-1} - C = 0.00000$

$\frac{N_1^4 \cdot N_2}{(((N_1^4-4 \cdot N_1^3)+6 \cdot N_1^2)-4 \cdot N_1)+1} - D = 0.00000$

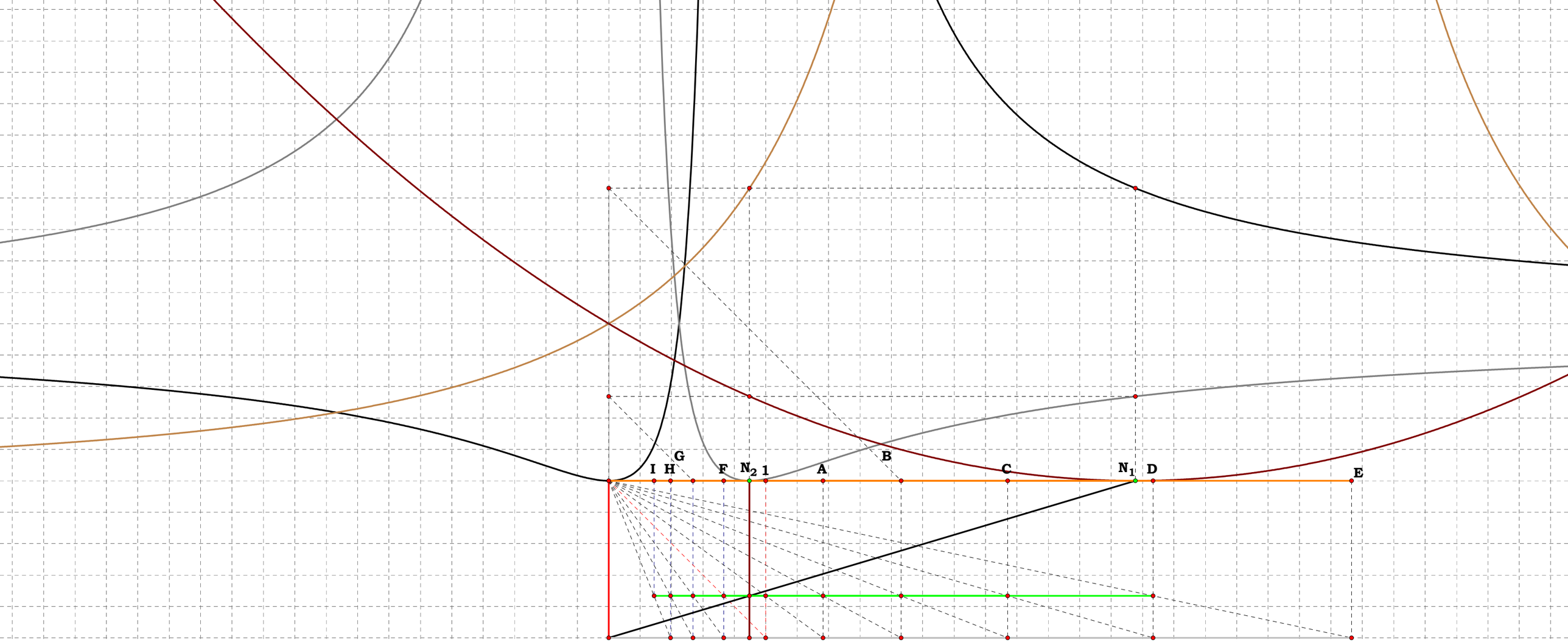
$\frac{N_1^5 \cdot N_2}{((((N_1^5-5 \cdot N_1^4)+10 \cdot N_1^3)-10 \cdot N_1^2)+5 \cdot N_1)-1} - E = 0.00000$

$\frac{(((N_1^4 \cdot N_2-4 \cdot N_1^3 \cdot N_2)+6 \cdot N_1^2 \cdot N_2)-4 \cdot N_1 \cdot N_2)+N_2}{N_1^4} - I = 0.00000$

$\frac{((N_1^3 \cdot N_2-3 \cdot N_1^2 \cdot N_2)+3 \cdot N_1 \cdot N_2)-N_2}{N_1^3} - H = 0.00000$

$\frac{(N_1^2 \cdot N_2-2 \cdot N_1 \cdot N_2)+N_2}{N_1^2} - G = 0.00000$

$\frac{N_1 \cdot N_2-N_2}{N_1} - F = 0.00000$



$N_1 = 3.35471$

$N_2 = 0.89626$

$\frac{N_1}{N_1-N_2} = 1.36456$

A = 1.36456

B = 1.86204

C = 2.54087

D = 3.46718

E = 4.73120

F = 0.73283

G = 0.53705

H = 0.39357

I = 0.28842

$\frac{N_1^{\ 1}}{N_1-N_2}$ -A = 0.00000

$\frac{N_1^{\ 2}}{N_1-N_2}$ -B = 0.00000

$\frac{N_1^{\ 3}}{N_1-N_2}$ -C = 0.00000

$\frac{N_1^{\ 4}}{N_1-N_2}$ -D = 0.00000

$\frac{N_1^{\ 5}}{N_1-N_2}$ -E = 0.00000

$\frac{N_1^{\ -1}}{N_1-N_2}$ -F = 0.00000

$\frac{N_1^{\ -2}}{N_1-N_2}$ -G = 0.00000

$\frac{N_1^{\ -3}}{N_1-N_2}$ -H = 0.00000

$\frac{N_1^{\ -4}}{N_1-N_2}$ -I = 0.00000

Plate 8

$\frac{N_1}{N_1-N_2}$ -A = 0.00000

$\frac{N_1^2}{(N_1^2-2\cdot N_1\cdot N_2)+N_2^2}$ -B = 0.00000

$\frac{N_1^3}{((N_1^3-3\cdot N_1^2\cdot N_2)+3\cdot N_1\cdot N_2^2)-N_2^3}$ -C = 0.00000

$\frac{N_1^4}{(((N_1^4-4\cdot N_1^3\cdot N_2)+6\cdot N_1^2\cdot N_2^2)-4\cdot N_1\cdot N_2^3)+N_2^4}$ -D = 0.00000

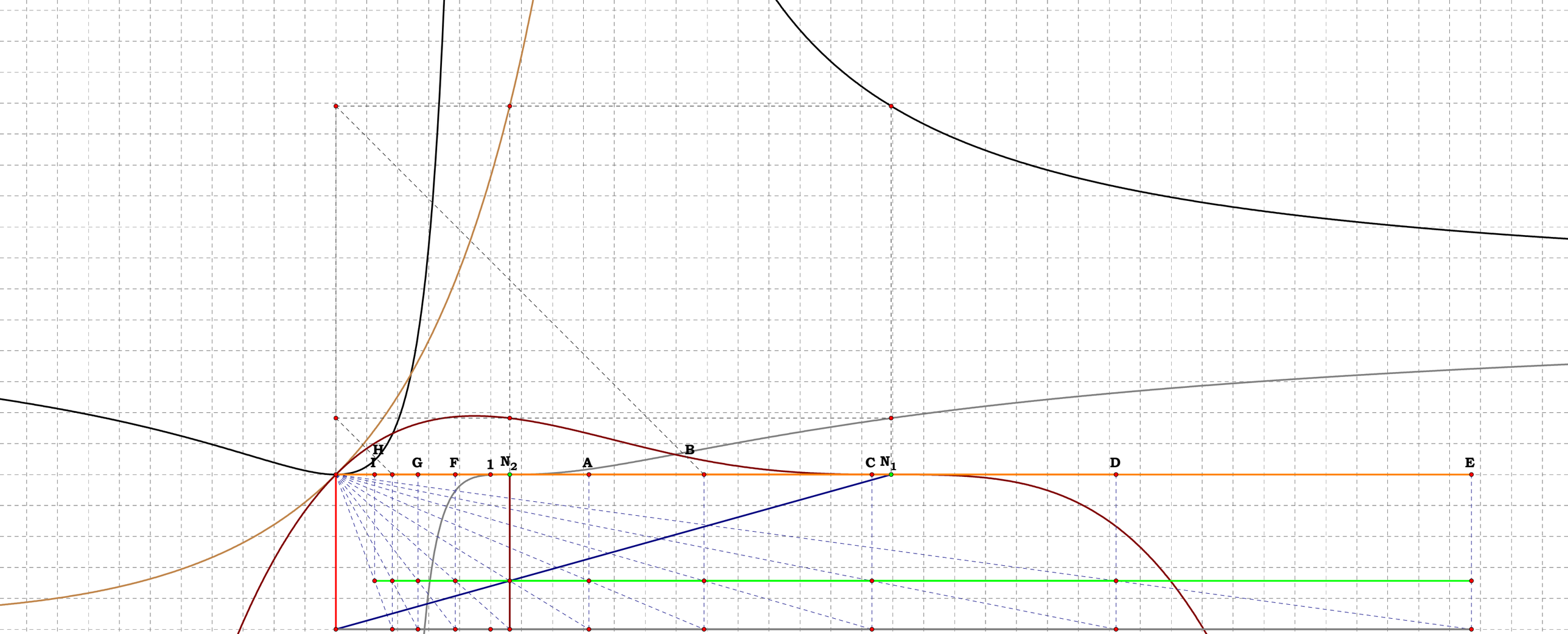
$\frac{N_1^5}{((((N_1^5-5\cdot N_1^4\cdot N_2)+10\cdot N_1^3\cdot N_2^2)-10\cdot N_1^2\cdot N_2^3)+5\cdot N_1\cdot N_2^4)-N_2^5}$ -E = 0.00000

$\frac{(((N_1^4-4\cdot N_1^3\cdot N_2)+6\cdot N_1^2\cdot N_2^2)-4\cdot N_1\cdot N_2^3)+N_2^4}{N_1^4}$ -I = 0.00000

$\frac{((N_1^3-3\cdot N_1^2\cdot N_2)+3\cdot N_1\cdot N_2^2)-N_2^3}{N_1^3}$ -H = 0.00000

$\frac{(N_1^2-2\cdot N_1\cdot N_2)+N_2^2}{N_1^2}$ -G = 0.00000

$\frac{N_1-N_2}{N_1}$ -F = 0.00000



$N_1 = 3.58991$

$N_2 = 1.12360$

$\frac{N_1}{N_1-N_2} = 1.45558$

A = 1.63549

B = 2.38058

C = 3.46513

D = 5.04377

E = 7.34160

F = 0.77193

G = 0.53032

H = 0.36434

I = 0.25030

$N_2 \cdot \frac{N_1}{N_1-N_2}^{1} - A = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-N_2}^{2} - B = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-N_2}^{3} - C = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-N_2}^{4} - D = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-N_2}^{5} - E = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-N_2}^{-1} - F = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-N_2}^{-2} - G = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-N_2}^{-3} - H = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-N_2}^{-4} - I = 0.00000$

Plate 9

$\frac{N_1 \cdot N_2}{N_1-N_2} - A = 0.00000$

$\frac{N_1^2 \cdot N_2}{(N_1^2-2 \cdot N_1 \cdot N_2)+N_2^2} - B = 0.00000$

$\frac{N_1^3 \cdot N_2}{((N_1^3-3 \cdot N_1^2 \cdot N_2)+3 \cdot N_1 \cdot N_2^2)-N_2^3} - C = 0.00000$

$\frac{N_1^4 \cdot N_2}{(((N_1^4-4 \cdot N_1^3 \cdot N_2)+6 \cdot N_1^2 \cdot N_2^2)-4 \cdot N_1 \cdot N_2^3)+N_2^4} - D = 0.00000$

$\frac{N_1^5 \cdot N_2}{((((N_1^5-5 \cdot N_1^4 \cdot N_2)+10 \cdot N_1^3 \cdot N_2^2)-10 \cdot N_1^2 \cdot N_2^3)+5 \cdot N_1 \cdot N_2^4)-N_2^5} - E = 0.00000$

$\frac{(((N_1^4 \cdot N_2-4 \cdot N_1^3 \cdot N_2^2)+6 \cdot N_1^2 \cdot N_2^3)-4 \cdot N_1 \cdot N_2^4)+N_2^5}{N_1^4} - I = 0.00000$

$\frac{((N_1^3 \cdot N_2-3 \cdot N_1^2 \cdot N_2^2)+3 \cdot N_1 \cdot N_2^3)-N_2^4}{N_1^3} - H = 0.00000$

$\frac{(N_1^2 \cdot N_2-2 \cdot N_1 \cdot N_2^2)+N_2^3}{N_1^2} - G = 0.00000$

$\frac{N_1 \cdot N_2-N_2^2}{N_1} - F = 0.00000$

$N_1 = 2.73670$

$N_2 = 0.77575$

$N_3 = 1.44291$

$\frac{N_1}{N_1-N_2} = 1.39560$

$A = 2.01373$

$B = 2.81035$

$C = 3.92211$

$D = 5.47368$

$E = 7.63905$

$F = 1.03391$

$G = 0.74083$

$H = 0.53084$

$I = 0.38037$

$N_3 \cdot \frac{N_1}{N_1-N_2}^{1} - A = 0.00000$

$N_3 \cdot \frac{N_1}{N_1-N_2}^{2} - B = 0.00000$

$N_3 \cdot \frac{N_1}{N_1-N_2}^{3} - C = 0.00000$

$N_3 \cdot \frac{N_1}{N_1-N_2}^{4} - D = 0.00000$

$N_3 \cdot \frac{N_1}{N_1-N_2}^{5} - E = 0.00000$

$N_3 \cdot \frac{N_1}{N_1-N_2}^{-1} - F = 0.00000$

$N_3 \cdot \frac{N_1}{N_1-N_2}^{-2} - G = 0.00000$

$N_3 \cdot \frac{N_1}{N_1-N_2}^{-3} - H = 0.00000$

$N_3 \cdot \frac{N_1}{N_1-N_2}^{-4} - I = 0.00000$

Plate 10

$\frac{N_1 \cdot N_3}{N_1-N_2} - A = 0.00000$

$\frac{N_1^2 \cdot N_3}{(N_1^2-2 \cdot N_1 \cdot N_2)+N_2^2} - B = 0.00000$

$\frac{N_1^3 \cdot N_3}{((N_1^3-3 \cdot N_1^2 \cdot N_2)+3 \cdot N_1 \cdot N_2^2)-N_2^3} - C = 0.00000$

$\frac{N_1^4 \cdot N_3}{(((N_1^4-4 \cdot N_1^3 \cdot N_2)+6 \cdot N_1^2 \cdot N_2^2)-4 \cdot N_1 \cdot N_2^3)+N_2^4} - D = 0.00000$

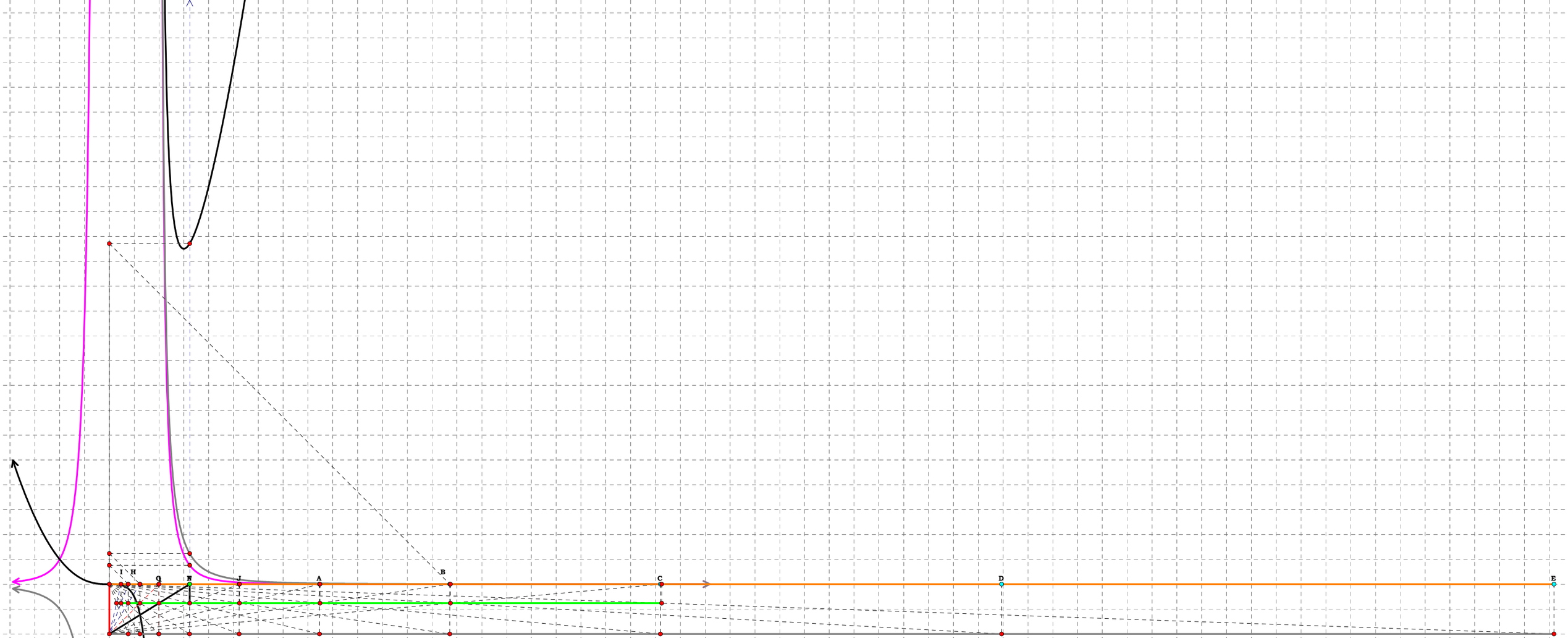
$\frac{N_1^5 \cdot N_3}{((((N_1^5-5 \cdot N_1^4 \cdot N_2)+10 \cdot N_1^3 \cdot N_2^2)-10 \cdot N_1^2 \cdot N_2^3)+5 \cdot N_1 \cdot N_2^4)-N_2^5} - E = 0.00000$

$\frac{(((N_1^4 \cdot N_3-4 \cdot N_1^3 \cdot N_2 \cdot N_3)+6 \cdot N_1^2 \cdot N_2^2 \cdot N_3)-4 \cdot N_1 \cdot N_2^3 \cdot N_3)+N_2^4 \cdot N_3}{N_1^4} - I = 0.00000$

$\frac{((N_1^3 \cdot N_3-3 \cdot N_1^2 \cdot N_2 \cdot N_3)+3 \cdot N_1 \cdot N_2^2 \cdot N_3)-N_2^3 \cdot N_3}{N_1^3} - H = 0.00000$

$\frac{(N_1^2 \cdot N_3-2 \cdot N_1 \cdot N_2 \cdot N_3)+N_2^2 \cdot N_3}{N_1^2} - G = 0.00000$

$\frac{N_1 \cdot N_3-N_2 \cdot N_3}{N_1} - F = 0.00000$



$N = 1.61903$

$\frac{N}{N-1} = 2.61543$

J = 2.61543
A = 4.23445
B = 6.85572
C = 11.09952
D = 17.97062
E = 29.09438
F = 1.61543
G = 0.99778
H = 0.61628
I = 0.38065

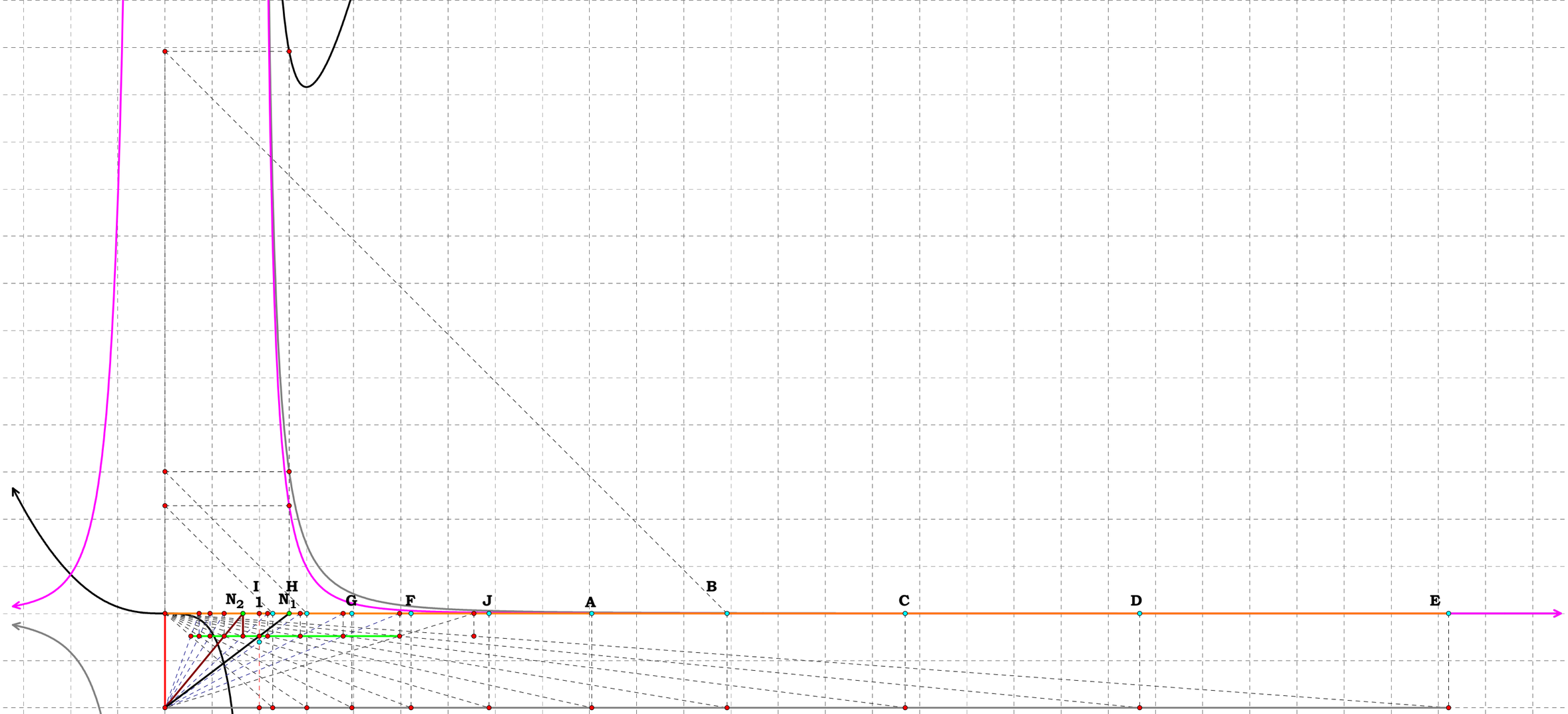
$N^0 \cdot \frac{N}{N-1} \cdot J = 0.00000$
$N^1 \cdot \frac{N}{N-1} \cdot A = 0.00000$
$N^2 \cdot \frac{N}{N-1} \cdot B = 0.00000$
$N^3 \cdot \frac{N}{N-1} \cdot C = 0.00000$
$N^4 \cdot \frac{N}{N-1} \cdot D = 0.00000$
$N^5 \cdot \frac{N}{N-1} \cdot E = 0.00000$

$N^{-1} \cdot \frac{N}{N-1} \cdot F = 0.00000$
$N^{-2} \cdot \frac{N}{N-1} \cdot G = 0.00000$
$N^{-3} \cdot \frac{N}{N-1} \cdot H = 0.00000$
$N^{-4} \cdot \frac{N}{N-1} \cdot I = 0.00000$

Plate 11

$\frac{N}{N-1} \cdot J = 0.00000$
$\frac{N^2}{N-1} \cdot A = 0.00000$
$\frac{N^3}{N-1} \cdot B = 0.00000$
$\frac{N^4}{N-1} \cdot C = 0.00000$
$\frac{N^5}{N-1} \cdot D = 0.00000$
$\frac{N^6}{N-1} \cdot E = 0.00000$

$\frac{1}{N-1} \cdot F = 0.00000$
$\frac{1}{N^2 \cdot N} \cdot G = 0.00000$
$\frac{1}{N^3 \cdot N^2} \cdot H = 0.00000$
$\frac{1}{N^4 \cdot N^3} \cdot I = 0.00000$



$N_1 = 1.31693$

$N_2 = 0.82679$

$\frac{N_1 \cdot N_2}{N_1 - 1} = 3.43551$

J = 3.43551
A = 4.52433
B = 5.95822
C = 7.84657
D = 10.33339
E = 13.60837
F = 2.60872
G = 1.98091
H = 1.50419
I = 1.14219

$N_1^0 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - J = 0.00000$

$N_1^1 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - A = 0.00000$

$N_1^2 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - B = 0.00000$

$N_1^3 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - C = 0.00000$

$N_1^4 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - D = 0.00000$

$N_1^5 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - E = 0.00000$

$N_1^{-1} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - F = 0.00000$

$N_1^{-2} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - G = 0.00000$

$N_1^{-3} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - H = 0.00000$

$N_1^{-4} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - I = 0.00000$

Plate 12

$\frac{N_1 \cdot N_2}{N_1 - 1} - J = 0.00000$

$\frac{N_1^2 \cdot N_2}{N_1 - 1} - A = 0.00000$

$\frac{N_1^3 \cdot N_2}{N_1 - 1} - B = 0.00000$

$\frac{N_1^4 \cdot N_2}{N_1 - 1} - C = 0.00000$

$\frac{N_1^5 \cdot N_2}{N_1 - 1} - D = 0.00000$

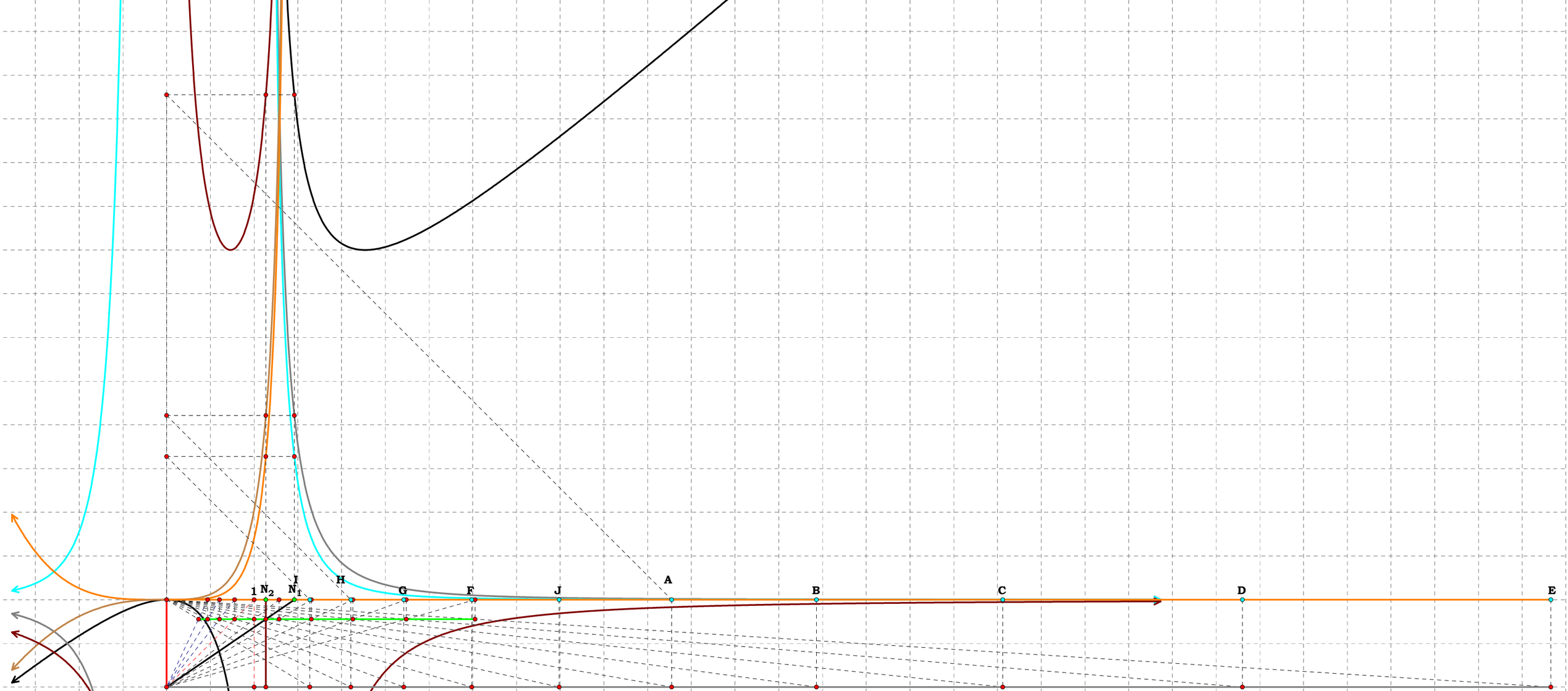
$\frac{N_1^6 \cdot N_2}{N_1 - 1} - E = 0.00000$

$\frac{N_2}{N_1 - 1} - F = 0.00000$

$\frac{N_2}{N_1^2 - N_1} - G = 0.00000$

$\frac{N_2}{N_1^3 - N_1^2} - H = 0.00000$

$\frac{N_2}{N_1^4 - N_1^3} - I = 0.00000$



$N_1 = 1.46046$

$N_2 = 1.13509$

$\frac{N_1}{N_2} = 1.28665$

$\frac{N_1}{N_1-N_2} = 4.48863$

J = 4.48863

A = 5.77527

B = 7.43073

C = 9.56072

D = 12.30126

E = 15.82736

F = 3.48863

G = 2.71141

H = 2.10735

I = 1.63786

$\frac{N_1^{\,0}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-J = 0.00000

$\frac{N_1^{\,1}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-A = 0.00000

$\frac{N_1^{\,2}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-B = 0.00000

$\frac{N_1^{\,3}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-C = 0.00000

$\frac{N_1^{\,4}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-D = 0.00000

$\frac{N_1^{\,5}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-E = 0.00000

$\frac{N_1^{\,-1}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-F = 0.00000

$\frac{N_1^{\,-2}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-G = 0.00000

$\frac{N_1^{\,-3}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-H = 0.00000

$\frac{N_1^{\,-4}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-I = 0.00000

Plate 13

$\frac{N_1}{N_1-N_2}$-J = 0.00000

$\frac{N_1^{\,2}}{N_1\cdot N_2-N_2^{\,2}}$-A = 0.00000

$\frac{N_1^{\,3}}{N_1\cdot N_2^{\,2}-N_2^{\,3}}$-B = 0.00000

$\frac{N_1^{\,4}}{N_1\cdot N_2^{\,3}-N_2^{\,4}}$-C = 0.00000

$\frac{N_1^{\,5}}{N_1\cdot N_2^{\,4}-N_2^{\,5}}$-D = 0.00000

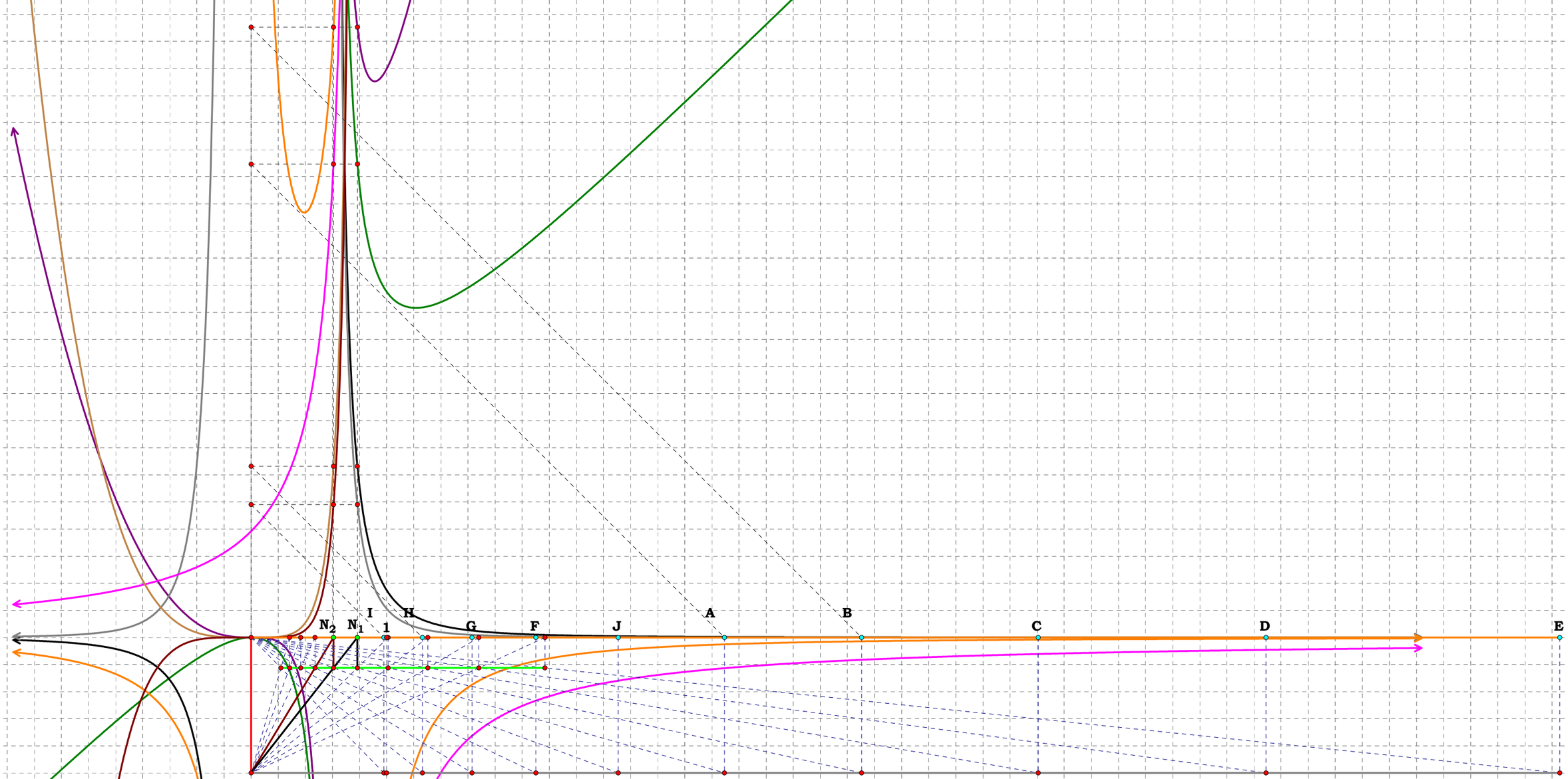
$\frac{N_1^{\,6}}{N_1\cdot N_2^{\,5}-N_2^{\,6}}$-E = 0.00000

$\frac{N_2}{N_1-N_2}$-F = 0.00000

$\frac{N_2^{\,2}}{N_1^{\,2}-N_1\cdot N_2}$-G = 0.00000

$\frac{N_2^{\,3}}{N_1^{\,3}-N_1^{\,2}\cdot N_2}$-H = 0.00000

$\frac{N_2^{\,4}}{N_1^{\,4}-N_1^{\,3}\cdot N_2}$-I = 0.00000



$N_1 = 0.78415$

$N_2 = 0.60814$

$\frac{N_1}{N_2} = 1.28943$

$\frac{N_1 \cdot N_2}{N_1 - N_2} = 2.70928$

J = 2.70928

A = 3.49343

B = 4.50454

C = 5.80830

D = 7.48941

E = 9.65708

F = 2.10114

G = 1.62951

H = 1.26374

I = 0.98008

$\frac{N_1^{\,0}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -J = 0.00000

$\frac{N_1^{\,1}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -A = 0.00000

$\frac{N_1^{\,2}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -B = 0.00000

$\frac{N_1^{\,3}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -C = 0.00000

$\frac{N_1^{\,4}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -D = 0.00000

$\frac{N_1^{\,5}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -E = 0.00000

$\frac{N_1^{\,-1}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -F = 0.00000

$\frac{N_1^{\,-2}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -G = 0.00000

$\frac{N_1^{\,-3}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -H = 0.00000

$\frac{N_1^{\,-4}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -I = 0.00000

Plate 14

$\frac{N_1 \cdot N_2}{N_1 - N_2}$ -J = 0.00000

$\frac{N_1^{\,2}}{N_1 - N_2}$ -A = 0.00000

$\frac{N_1^{\,3}}{N_1 \cdot N_2 - N_2^{\,2}}$ -B = 0.00000

$\frac{N_1^{\,4}}{N_1 \cdot N_2^{\,2} - N_2^{\,3}}$ -C = 0.00000

$\frac{N_1^{\,5}}{N_1 \cdot N_2^{\,3} - N_2^{\,4}}$ -D = 0.00000

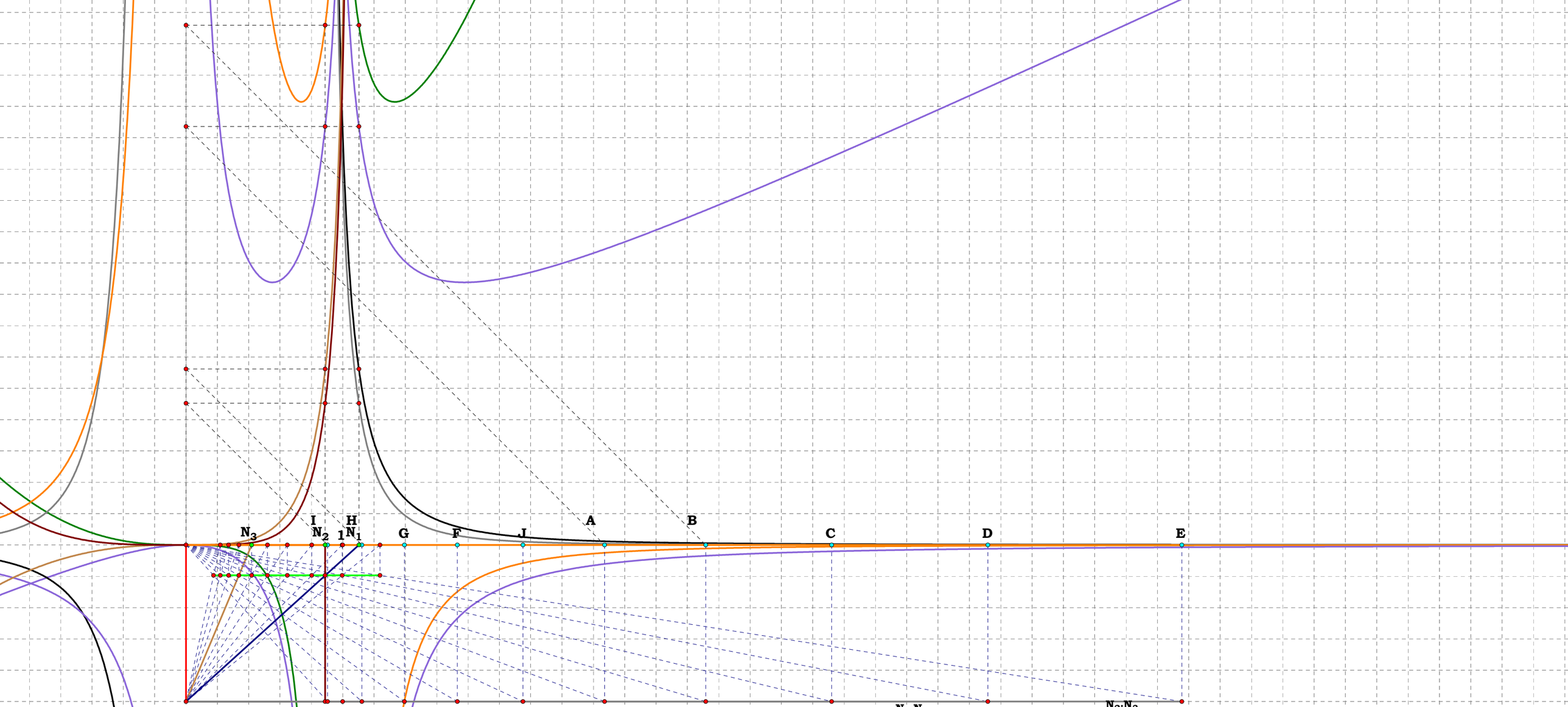
$\frac{N_1^{\,6}}{N_1 \cdot N_2^{\,4} - N_2^{\,5}}$ -E = 0.00000

$\frac{N_2^{\,2}}{N_1 - N_2}$ -F = 0.00000

$\frac{N_2^{\,3}}{N_1^{\,2} - N_1 \cdot N_2}$ -G = 0.00000

$\frac{N_2^{\,4}}{N_1^{\,3} - N_1^{\,2} \cdot N_2}$ -H = 0.00000

$\frac{N_2^{\,5}}{N_1^{\,4} - N_1^{\,3} \cdot N_2}$ -I = 0.00000



$N_1 = 1.10350$

$N_2 = 0.88853$

$N_3 = 0.41903$

$\frac{N_1}{N_2} = 1.24195$

$\frac{N_1 \cdot N_3}{N_1 - N_2} = 2.15096$

J = 2.15096

A = 2.67138

B = 3.31772

C = 4.12043

D = 5.11735

E = 6.35548

F = 1.73193

G = 1.39453

H = 1.12286

I = 0.90411

$\frac{N_1^{\,0} \cdot N_1 \cdot N_3}{N_2} \cdot \frac{}{N_1 - N_2} - J = 0.00000$

$\frac{N_1^{\,1} \cdot N_1 \cdot N_3}{N_2} \cdot \frac{}{N_1 - N_2} - A = 0.00000$

$\frac{N_1^{\,2} \cdot N_1 \cdot N_3}{N_2} \cdot \frac{}{N_1 - N_2} - B = 0.00000$

$\frac{N_1^{\,3} \cdot N_1 \cdot N_3}{N_2} \cdot \frac{}{N_1 - N_2} - C = 0.00000$

$\frac{N_1^{\,4} \cdot N_1 \cdot N_3}{N_2} \cdot \frac{}{N_1 - N_2} - D = 0.00000$

$\frac{N_1^{\,5} \cdot N_1 \cdot N_3}{N_2} \cdot \frac{}{N_1 - N_2} - E = 0.00000$

$\frac{N_1^{\,-1} \cdot N_1 \cdot N_3}{N_2} \cdot \frac{}{N_1 - N_2} - F = 0.00000$

$\frac{N_1^{\,-2} \cdot N_1 \cdot N_3}{N_2} \cdot \frac{}{N_1 - N_2} - G = 0.00000$

$\frac{N_1^{\,-3} \cdot N_1 \cdot N_3}{N_2} \cdot \frac{}{N_1 - N_2} - H = 0.00000$

$\frac{N_1^{\,-4} \cdot N_1 \cdot N_3}{N_2} \cdot \frac{}{N_1 - N_2} - I = 0.00000$

Plate 15

$\frac{N_1 \cdot N_3}{N_1 - N_2} - J = 0.00000$

$\frac{N_1^{\,2} \cdot N_3}{N_1 \cdot N_2 - N_2^{\,2}} - A = 0.00000$

$\frac{N_1^{\,3} \cdot N_3}{N_1 \cdot N_2^{\,2} - N_2^{\,3}} - B = 0.00000$

$\frac{N_1^{\,4} \cdot N_3}{N_1 \cdot N_2^{\,3} - N_2^{\,4}} - C = 0.00000$

$\frac{N_1^{\,5} \cdot N_3}{N_1 \cdot N_2^{\,4} - N_2^{\,5}} - D = 0.00000$

$\frac{N_1^{\,6} \cdot N_3}{N_1 \cdot N_2^{\,5} - N_2^{\,6}} - E = 0.00000$

$\frac{N_2 \cdot N_3}{N_1 - N_2} - F = 0.00000$

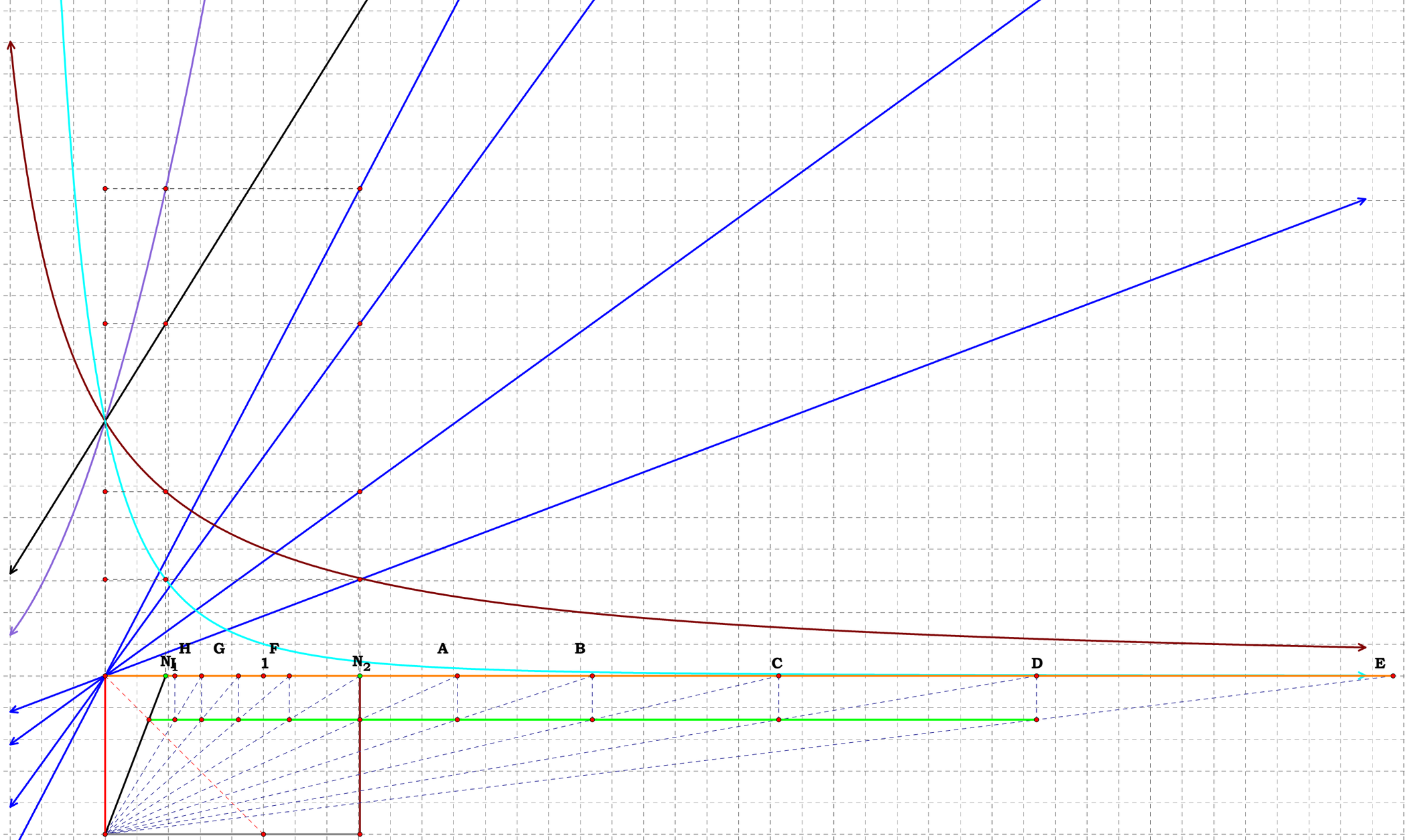
$\frac{N_2^{\,2} \cdot N_3}{N_1^{\,2} - N_1 \cdot N_2} - G = 0.00000$

$\frac{N_2^{\,3} \cdot N_3}{N_1^{\,3} - N_1^{\,2} \cdot N_2} - H = 0.00000$

$\frac{N_2^{\,4} \cdot N_3}{N_1^{\,4} - N_1^{\,3} \cdot N_2} - I = 0.00000$

N = 0.67329

A = 1.12662	$N\cdot(N+1)^{1}-A$ = 0.00000
B = 1.88516	$N\cdot(N+1)^{2}-B$ = 0.00000
C = 3.15443	$N\cdot(N+1)^{3}-C$ = 0.00000
D = 5.27830	$N\cdot(N+1)^{4}-D$ = 0.00000
E = 8.83214	$N\cdot(N+1)^{5}-E$ = 0.00000
F = 0.40238	$N\cdot(N+1)^{-1}-F$ = 0.00000
G = 0.24047	$N\cdot(N+1)^{-2}-G$ = 0.00000
H = 0.14371	$N\cdot(N+1)^{-3}-H$ = 0.00000
I = 0.08588	$N\cdot(N+1)^{-4}-I$ = 0.00000



$N_1 = 0.38279$

$N_2 = 1.60857$

$A = 2.22432$

$B = 3.07576$

$C = 4.25313$

$D = 5.88118$

$E = 8.13244$

$F = 1.16328$

$G = 0.84126$

$H = 0.60838$

$I = 0.43996$

$N_2\cdot(N_1+1)^1-A = 0.00000$

$N_2\cdot(N_1+1)^2-B = 0.00000$

$N_2\cdot(N_1+1)^3-C = 0.00000$

$N_2\cdot(N_1+1)^4-D = 0.00000$

$N_2\cdot(N_1+1)^5-E = 0.00000$

$N_2\cdot(N_1+1)^{-1}-F = 0.00000$

$N_2\cdot(N_1+1)^{-2}-G = 0.00000$

$N_2\cdot(N_1+1)^{-3}-H = 0.00000$

$N_2\cdot(N_1+1)^{-4}-I = 0.00000$

$N_1 = 1.12857$

$N_2 = 2.29441$

$A = 1.68369$

$B = 2.51186$

$C = 3.74738$

$D = 5.59064$

$E = 8.34056$

$F = 0.75648$

$G = 0.50706$

$H = 0.33988$

$I = 0.22782$

$N_1 \cdot \frac{N_1+N_2}{N_2}^{1} - A = 0.00000$

$N_1 \cdot \frac{N_1+N_2}{N_2}^{2} - B = 0.00000$

$N_1 \cdot \frac{N_1+N_2}{N_2}^{3} - C = 0.00000$

$N_1 \cdot \frac{N_1+N_2}{N_2}^{4} - D = 0.00000$

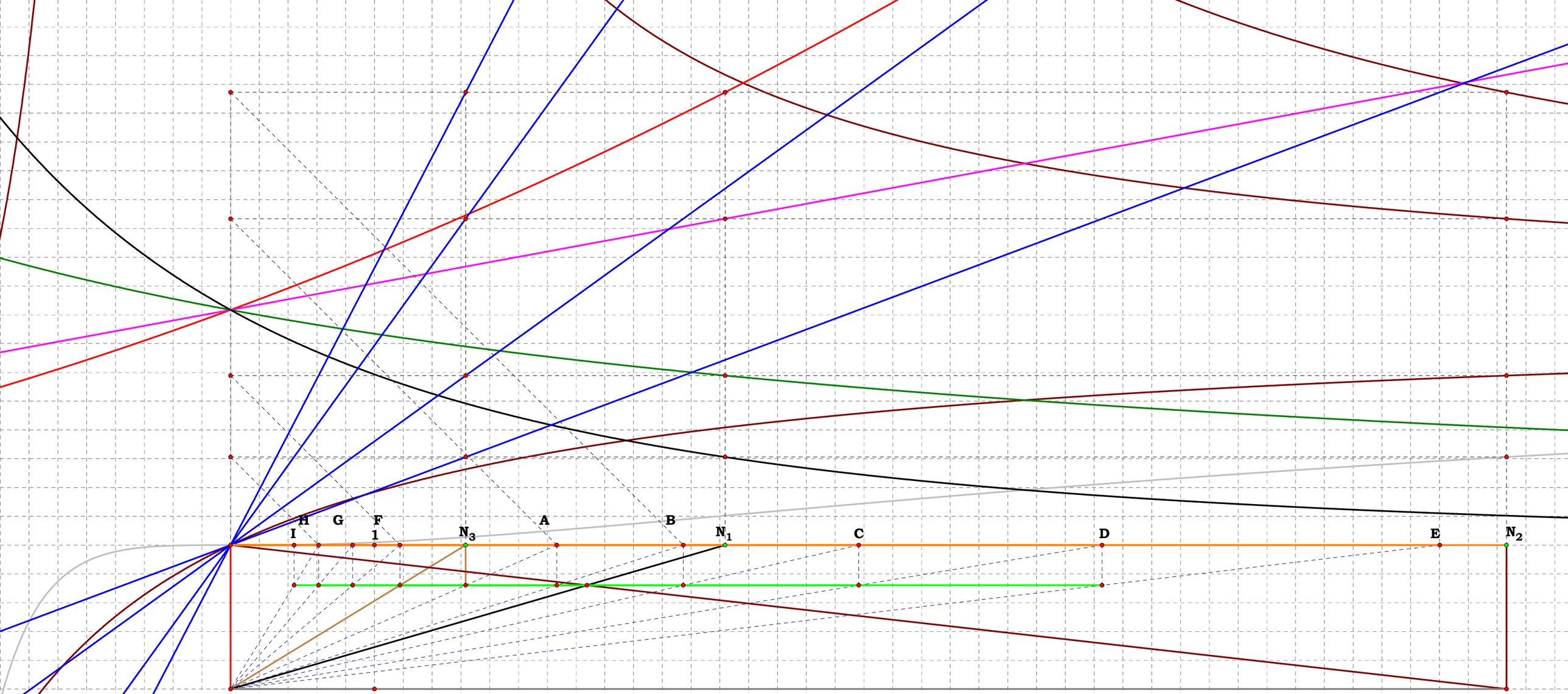
$N_1 \cdot \frac{N_1+N_2}{N_2}^{5} - E = 0.00000$

$N_1 \cdot \frac{N_1+N_2}{N_2}^{-1} - F = 0.00000$

$N_1 \cdot \frac{N_1+N_2}{N_2}^{-2} - G = 0.00000$

$N_1 \cdot \frac{N_1+N_2}{N_2}^{-3} - H = 0.00000$

$N_1 \cdot \frac{N_1+N_2}{N_2}^{-4} - I = 0.00000$



$N_1 = 3.43566$

$N_2 = 8.86571$

$N_3 = 1.63369$

$A = 2.26679$

$B = 3.14522$

$C = 4.36406$

$D = 6.05523$

$E = 8.40177$

$F = 1.17742$

$G = 0.84858$

$H = 0.61158$

$I = 0.44077$

$N_3 \cdot \frac{N_1+N_2}{N_2}^{1} - A = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_2}^{2} - B = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_2}^{3} - C = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_2}^{4} - D = 0.00000$

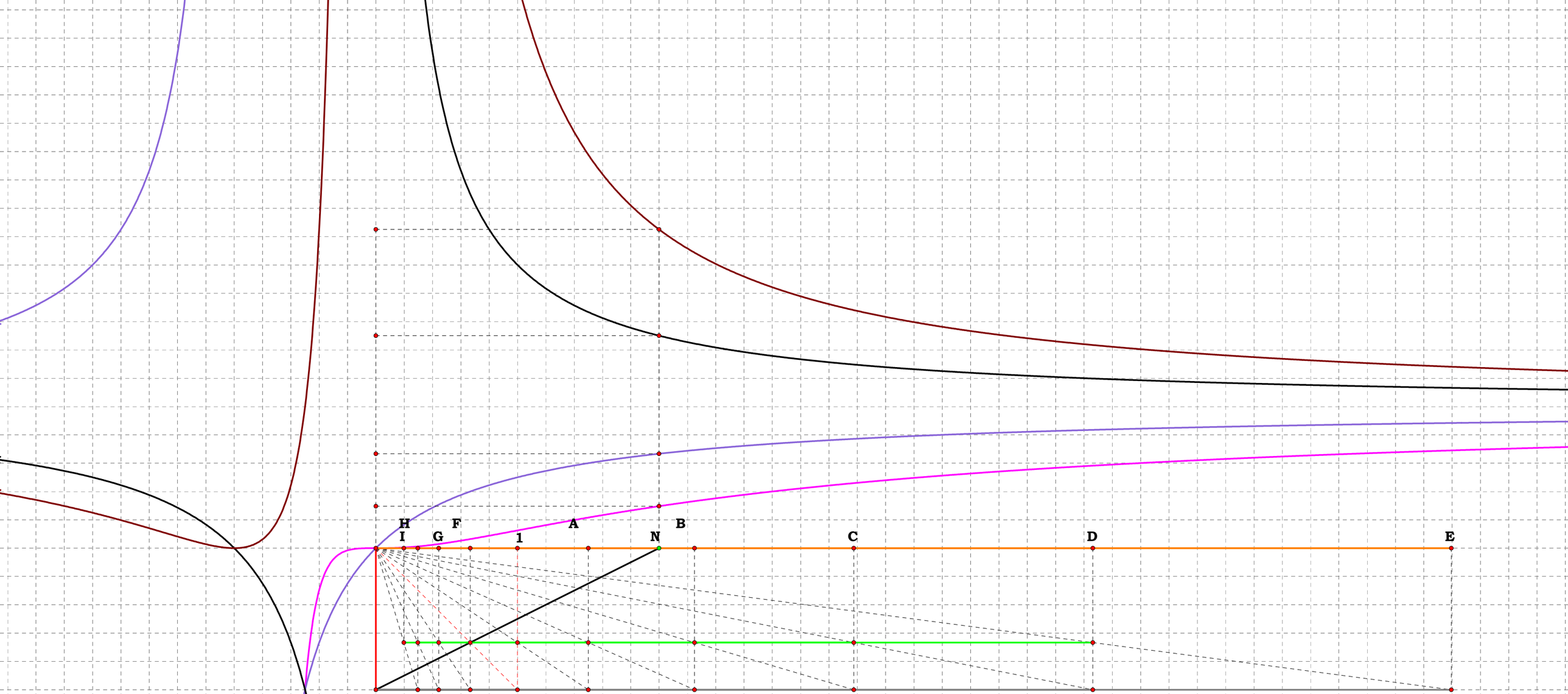
$N_3 \cdot \frac{N_1+N_2}{N_2}^{5} - E = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_2}^{-1} - F = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_2}^{-2} - G = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_2}^{-3} - H = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_2}^{-4} - I = 0.00000$



N = 2.00000

A = 1.50000

B = 2.25000

C = 3.37500

D = 5.06250

E = 7.59375

$\frac{N+1^{1}}{N}$ -A = 0.00000

$\frac{N+1^{2}}{N}$ -B = 0.00000

$\frac{N+1^{3}}{N}$ -C = 0.00000

$\frac{N+1^{4}}{N}$ -D = 0.00000

$\frac{N+1^{5}}{N}$ -E = 0.00000

F = 0.66667

G = 0.44444

H = 0.29630

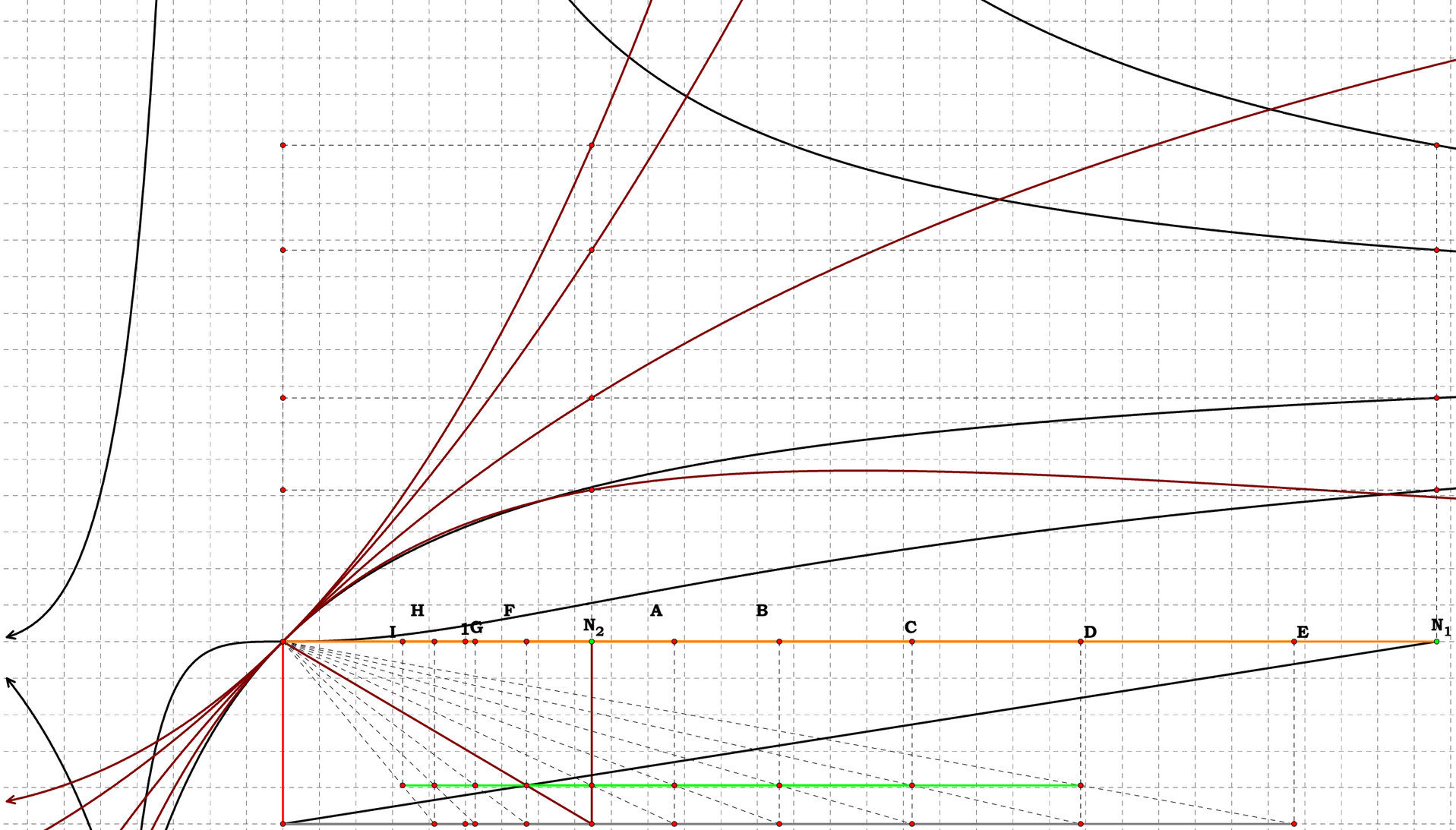
I = 0.19753

$\frac{N+1^{-1}}{N}$ -F = 0.00000

$\frac{N+1^{-2}}{N}$ -G = 0.00000

$\frac{N+1^{-3}}{N}$ -H = 0.00000

$\frac{N+1^{-4}}{N}$ -I = 0.00000



$N_1 = 6.32383$

$N_2 = 1.69284$

$A = 2.14600$

$B = 2.72047$

$C = 3.44872$

$D = 4.37192$

$E = 5.54225$

$F = 1.33537$

$G = 1.05339$

$H = 0.83095$

$I = 0.65548$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{1} - A = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{2} - B = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{3} - C = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{4} - D = 0.00000$

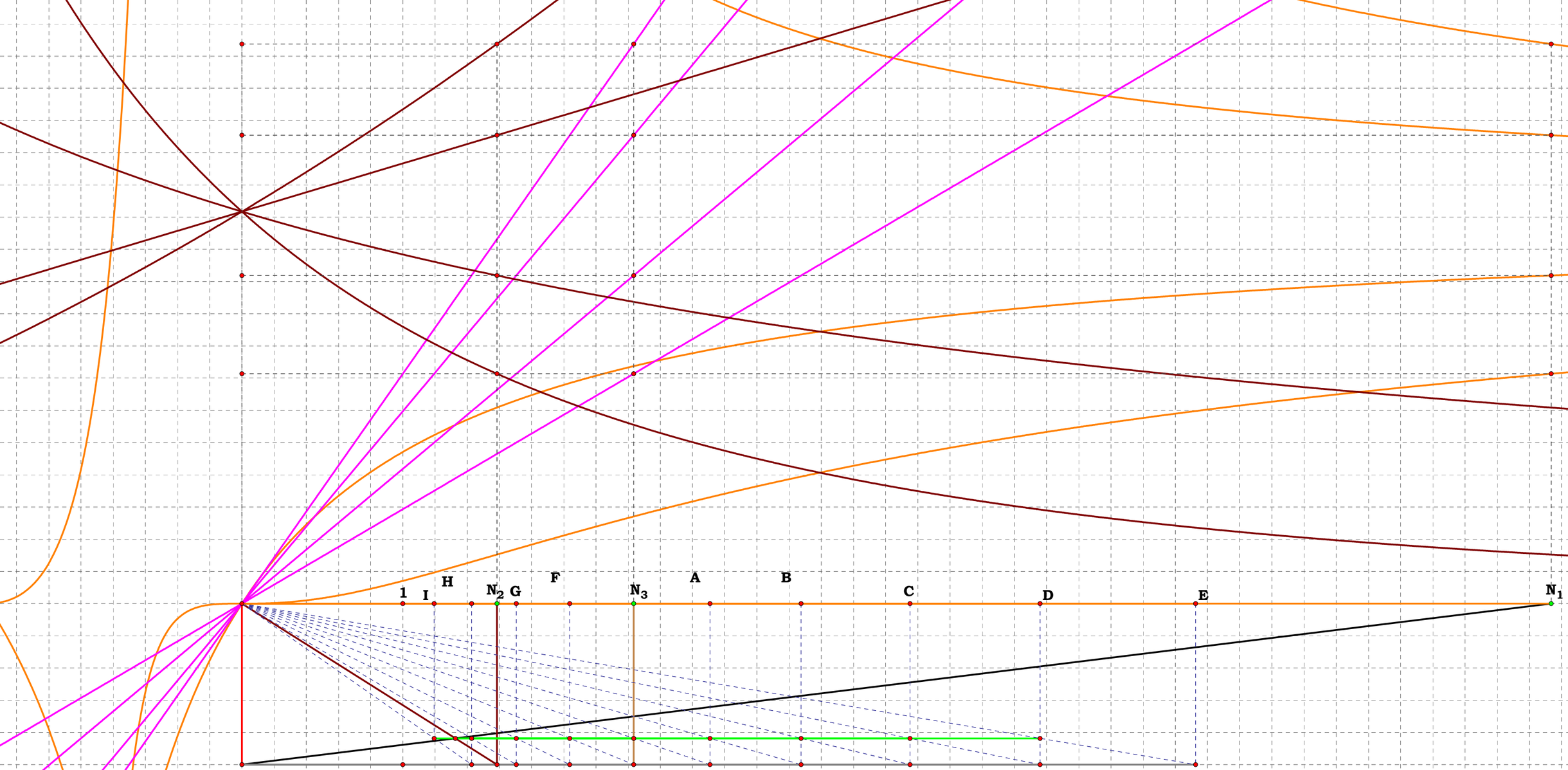
$N_2 \cdot \frac{N_1+N_2}{N_1}^{5} - E = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{-1} - F = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{-2} - G = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{-3} - H = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{-4} - I = 0.00000$



$\frac{N_1+N_2}{N_1} = 1.19477$

A = 2.90820

B = 3.47463

C = 4.15140

D = 4.95998

E = 5.92605

$N_3 \cdot \frac{N_1+N_2}{N_1} - A = 0.00000$

$N_3 \cdot \frac{N_1+N_2^{\,2}}{N_1} - B = 0.00000$

$N_3 \cdot \frac{N_1+N_2^{\,3}}{N_1} - C = 0.00000$

$N_3 \cdot \frac{N_1+N_2^{\,4}}{N_1} - D = 0.00000$

$N_3 \cdot \frac{N_1+N_2^{\,5}}{N_1} - E = 0.00000$

F = 2.03729

G = 1.70517

H = 1.42719

I = 1.19453

$N_3 \cdot \frac{N_1+N_2^{\,-1}}{N_1} - F = 0.00000$

$N_3 \cdot \frac{N_1+N_2^{\,-2}}{N_1} - G = 0.00000$

$N_3 \cdot \frac{N_1+N_2^{\,-3}}{N_1} - H = 0.00000$

$N_3 \cdot \frac{N_1+N_2^{\,-4}}{N_1} - I = 0.00000$

N[1] -> 0

N[1] -> 1

N[1] -> 2

N_1 = 1.34212

N[1] -> 3

N[1] -> 4

N[1] -> 5

N[1] -> 6

N[1] -> 7

N[1] -> 8

N[1] -> 9

N[1] -> 10

N[1] -> 11

N[2] -> 0

N_1+N_3 = 2.14828

N[2] -> 1

N[2] -> 2

N[2] -> 3

N[2] -> 4

N[2] -> 5

N[2] -> 6

N[2] -> 7

N[2] -> 8

N[2] -> 9

N[2] -> 10

N[2] -> 11

N_2 = 0.95301

N[3] -> 0

N[3] -> 1

N[3] -> 2

N[3] -> 3

N[3] -> 4

N[3] -> 5

N[3] -> 6

N[3] -> 7

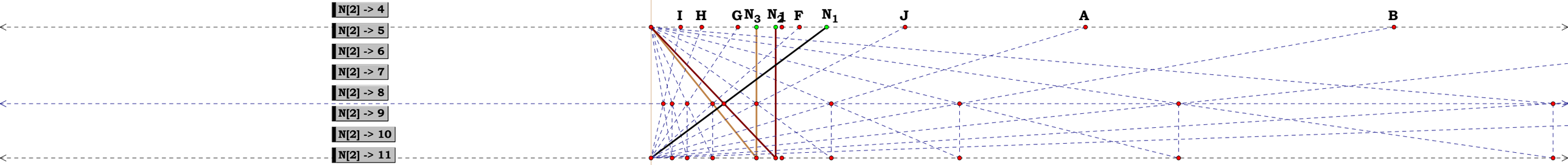
N[3] -> 8

N[3] -> 9

N[3] -> 10

N[3] -> 11

N_3 = 0.80616



J = 1.94148

A = 3.32007

B = 5.67758

C = 9.70909

D = 16.60329

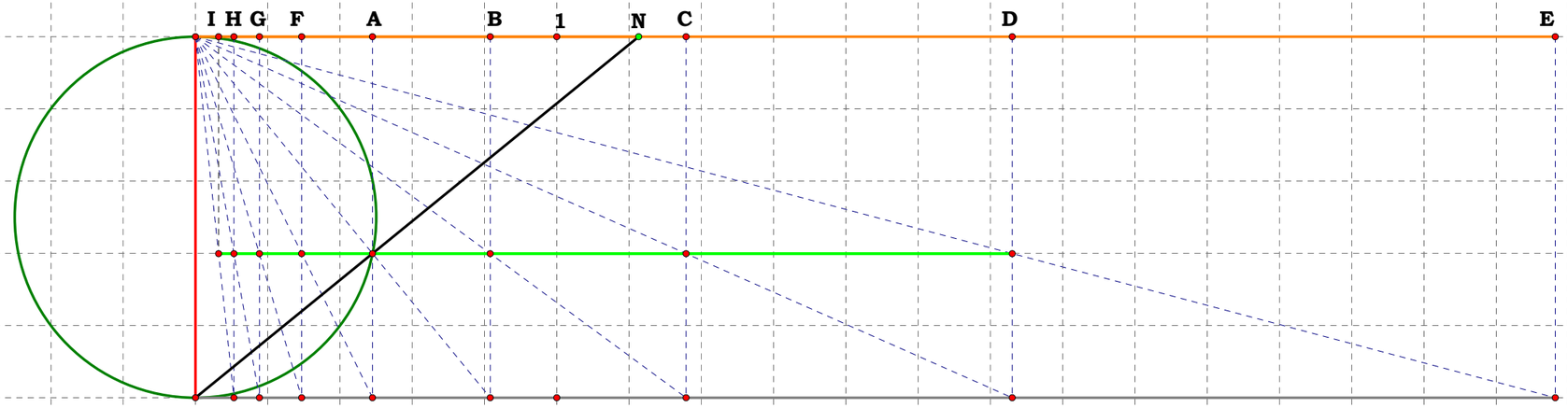
E = 28.39290

F = 1.13532

G = 0.66390

H = 0.38823

I = 0.22702



$\frac{N}{N^2+1} = 0.48977$

$\frac{N^2+1}{N^2} = 1.66488$

$N = 1.22639$

$A = 0.48977$

$B = 0.81540$

$C = 1.35755$

$D = 2.26016$

$E = 3.76290$

$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{0} - A = 0.00000$

$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{1} - B = 0.00000$

$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{2} - C = 0.00000$

$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{3} - D = 0.00000$

$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{4} - E = 0.00000$

$F = 0.29417$

$G = 0.17669$

$H = 0.10613$

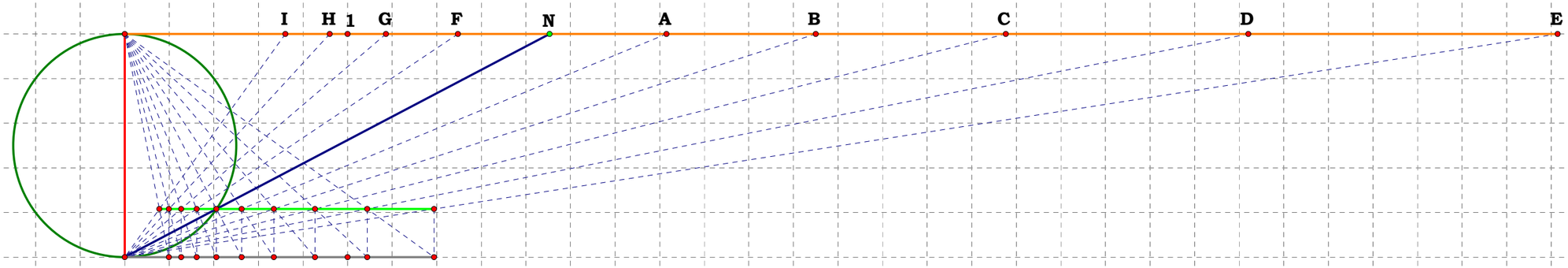
$I = 0.06375$

$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{-1} - F = 0.00000$

$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{-2} - G = 0.00000$

$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{-3} - H = 0.00000$

$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{-4} - I = 0.00000$



$\frac{N^2+1}{N^2} = 1.27525$

$\frac{N^2+1}{N} = 2.43071$

$N+\frac{1}{N} = 2.43071$

$N = 1.90607$

$A = 2.43071$

$B = 3.09976$

$C = 3.95295$

$D = 5.04098$

$E = 6.42849$

$\frac{N^2+1}{N}\cdot\frac{N^2+1^{\,0}}{N^2}$ -A = 0.00000

$\frac{N^2+1}{N}\cdot\frac{N^2+1^{\,1}}{N^2}$ -B = 0.00000

$\frac{N^2+1}{N}\cdot\frac{N^2+1^{\,2}}{N^2}$ -C = 0.00000

$\frac{N^2+1}{N}\cdot\frac{N^2+1^{\,3}}{N^2}$ -D = 0.00000

$\frac{N^2+1}{N}\cdot\frac{N^2+1^{\,4}}{N^2}$ -E = 0.00000

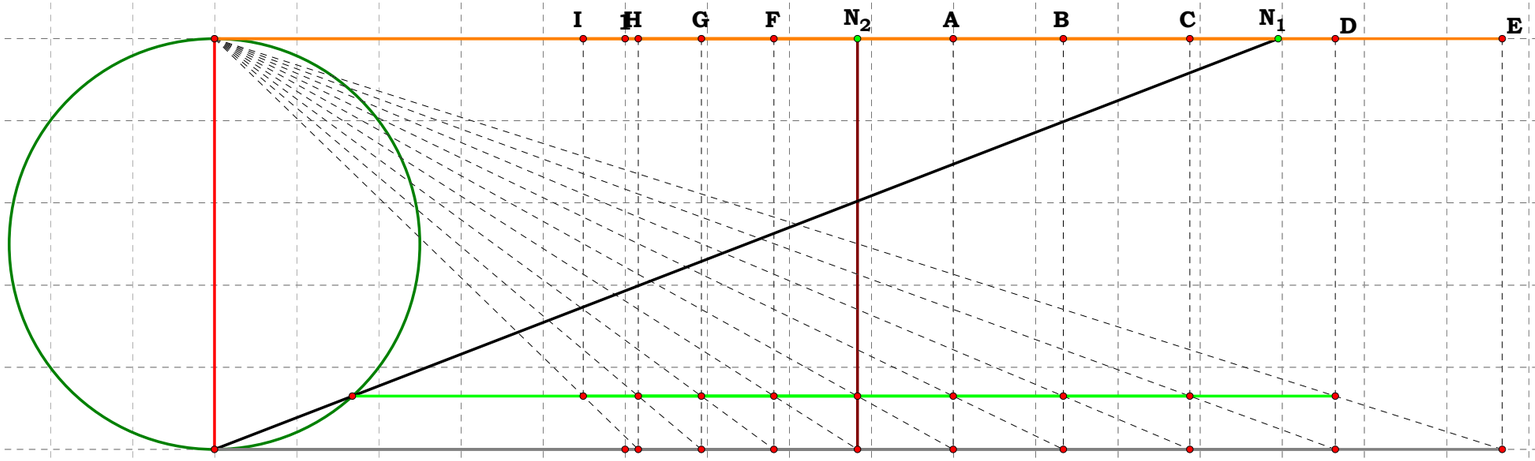
$F = 1.49467$ $\frac{N^2+1}{N}\cdot\frac{N^2+1^{\,-2}}{N^2}$ -F = 0.00000

$G = 1.17207$

$H = 0.91909$ $\frac{N^2+1}{N}\cdot\frac{N^2+1^{\,-3}}{N^2}$ -G = 0.00000

$I = 0.72072$ $\frac{N^2+1}{N}\cdot\frac{N^2+1^{\,-4}}{N^2}$ -H = 0.00000

$\frac{N^2+1}{N}\cdot\frac{N^2+1^{\,-5}}{N^2}$ -I = 0.00000



$$\frac{N_1^2+1}{N_1^2} = 1.14908$$

$$\frac{N_2\cdot(N_1^2+1)}{N_1^2} = 1.79864$$

$N_1 = 2.58997$

$N_2 = 1.56529$

A = 1.79864
B = 2.06677
C = 2.37488
D = 2.72892
E = 3.13573

$$\frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1^{\,0}}{N_1^2} - A = 0.00000$$

$$\frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1^{\,1}}{N_1^2} - B = 0.00000$$

$$\frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1^{\,2}}{N_1^2} - C = 0.00000$$

$$\frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1^{\,3}}{N_1^2} - D = 0.00000$$

$$\frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1^{\,4}}{N_1^2} - E = 0.00000$$

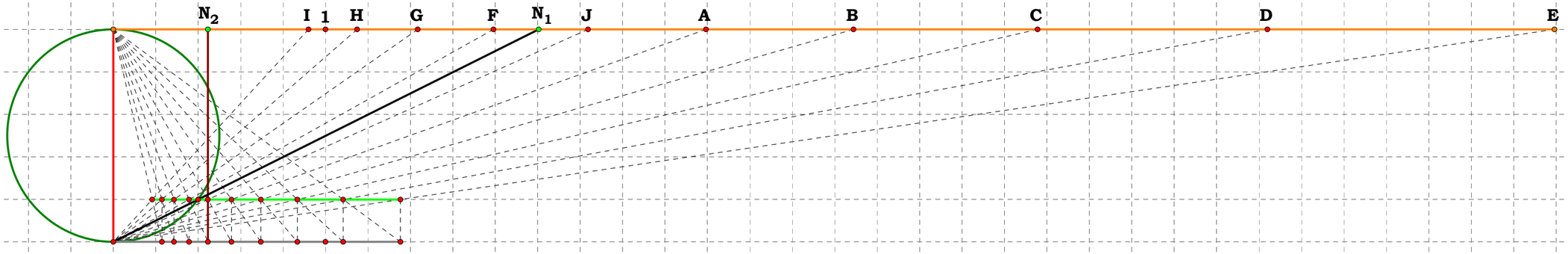
F = 1.36221
G = 1.18549
H = 1.03169
I = 0.89784

$$\frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1^{\,-2}}{N_1^2} - F = 0.00000$$

$$\frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1^{\,-3}}{N_1^2} - G = 0.00000$$

$$\frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1^{\,-4}}{N_1^2} - H = 0.00000$$

$$\frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1^{\,-5}}{N_1^2} - I = 0.00000$$



$N_2 \cdot (N_1^2+1) = 2.23722$

$\frac{N_1^2+1}{N_1^2} = 1.24872$

$N_1 = 2.00514$

$N_2 = 0.44561$

$A = 2.79366$
$B = 3.48849$
$C = 4.35614$
$D = 5.43960$
$E = 6.79253$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,1}}{N_1^2} - A = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,2}}{N_1^2} - B = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,3}}{N_1^2} - C = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,4}}{N_1^2} - D = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,5}}{N_1^2} - E = 0.00000$

$J = 2.23722$
$F = 1.79161$
$G = 1.43476$
$H = 1.14898$
$I = 0.92013$

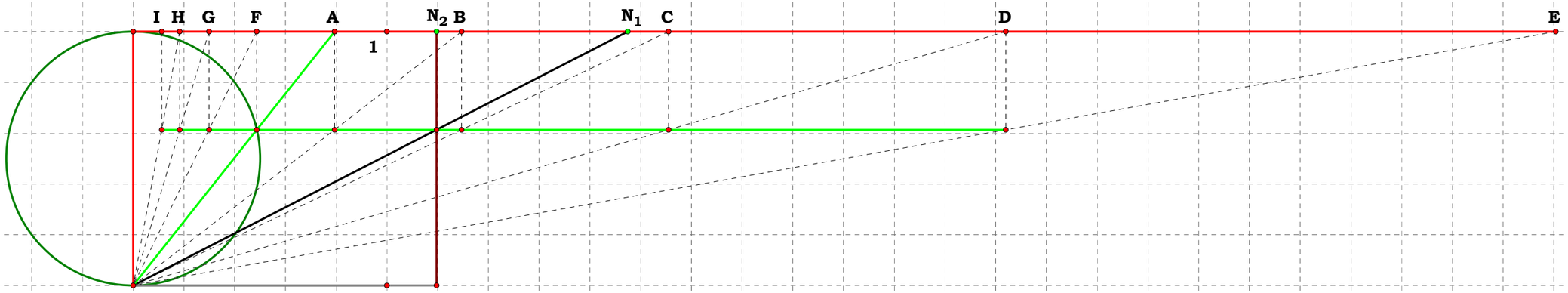
$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,0}}{N_1^2} - J = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,-1}}{N_1^2} - F = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,-2}}{N_1^2} - G = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,-3}}{N_1^2} - H = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,-4}}{N_1^2} - I = 0.00000$



$\frac{N_1}{N_2} = 1.63024$

$\sqrt{\frac{N_1-N_2}{N_2}} = 0.79388$

$N_1 = 1.94939$

$N_2 = 1.19577$

$A = 0.79388$

$B = 1.29421$

$C = 2.10988$

$D = 3.43962$

$E = 5.60741$

$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,0}}{N_2} - A = 0.00000$

$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,1}}{N_2} - B = 0.00000$

$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,2}}{N_2} - C = 0.00000$

$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,3}}{N_2} - D = 0.00000$

$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,4}}{N_2} - E = 0.00000$

$F = 0.48697$

$G = 0.29871$

$H = 0.18323$

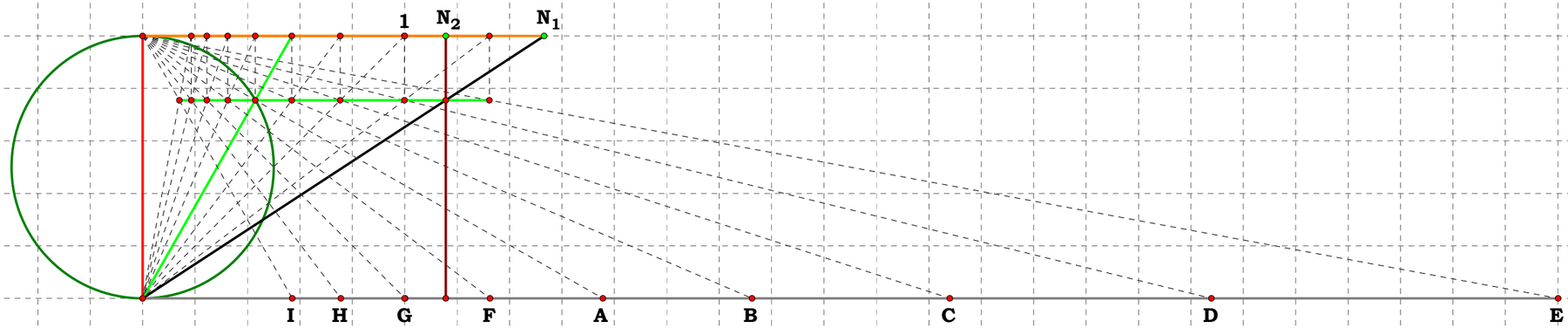
$I = 0.11239$

$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,-1}}{N_2} - F = 0.00000$

$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,-2}}{N_2} - G = 0.00000$

$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,-3}}{N_2} - H = 0.00000$

$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,-4}}{N_2} - I = 0.00000$



$$\sqrt{\frac{N_2}{N_1-N_2}} = 1.75589$$

$$\frac{N_1}{N_2} = 1.32434$$

$N_1 = 1.53175$

$N_2 = 1.15661$

$A = 1.75589$

$B = 2.32540$

$C = 3.07963$

$D = 4.07849$

$E = 5.40133$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1^{\,0}}{N_2} - A = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1^{\,1}}{N_2} - B = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1^{\,2}}{N_2} - C = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1^{\,3}}{N_2} - D = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1^{\,4}}{N_2} - E = 0.00000$$

$F = 1.32585$

$G = 1.00114$

$H = 0.75595$

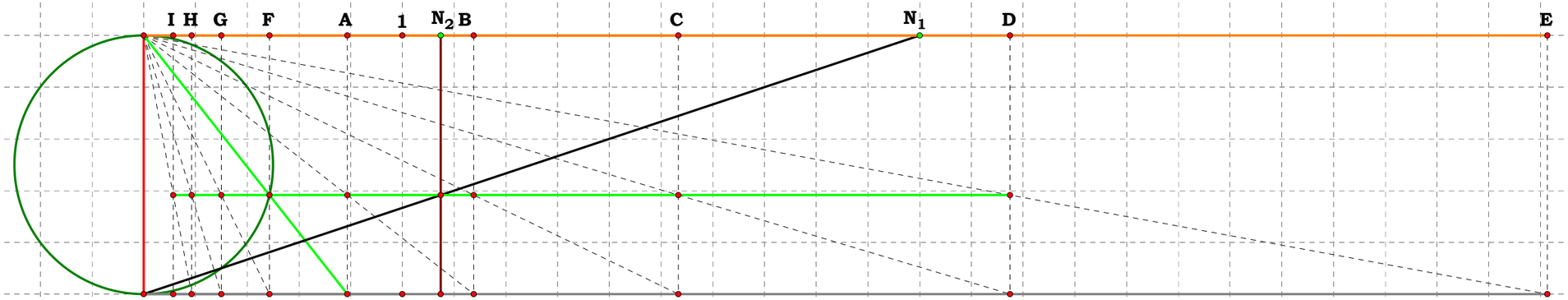
$I = 0.57081$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1^{\,-1}}{N_2} - F = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1^{\,-2}}{N_2} - G = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1^{\,-3}}{N_2} - H = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1^{\,-4}}{N_2} - I = 0.00000$$



$$\sqrt{\frac{N_2}{N_1-N_2}} = 0.78754$$

$$\frac{N_1}{N_1-N_2} = 1.62022$$

$N_1 = 3.00000$

$N_2 = 1.14840$

$A = 0.78754$

$B = 1.27600$

$C = 2.06740$

$D = 3.34965$

$E = 5.42718$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{0} - A = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{1} - B = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{2} - C = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{3} - D = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{4} - E = 0.00000$$

$F = 0.48607$

$G = 0.30000$

$H = 0.18516$

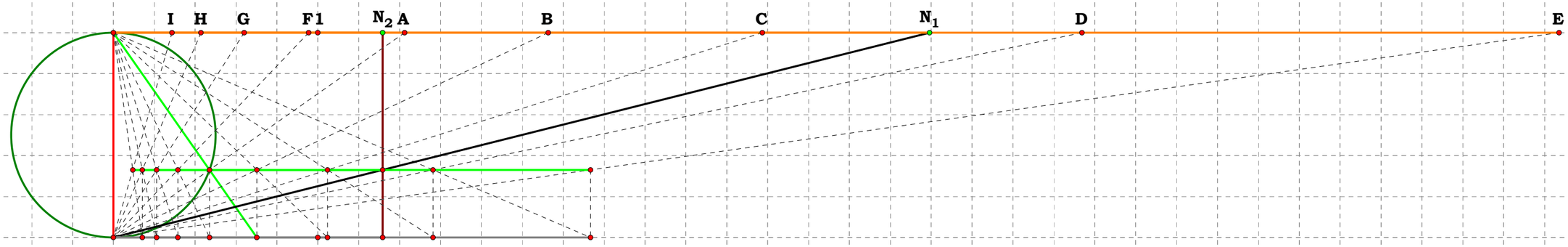
$I = 0.11428$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{-1} - F = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{-2} - G = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{-3} - H = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{-4} - I = 0.00000$$



$$\sqrt{\frac{N_1-N_2}{N_2}} = 1.42482$$

$$\frac{N_1}{N_1-N_2} = 1.49258$$

$N_1 = 3.99177$

$N_2 = 1.31737$

$A = 1.42482$

$B = 2.12666$

$C = 3.17422$

$D = 4.73779$

$E = 7.07155$

$$\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1}{N_1-N_2}^{0} - A = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1}{N_1-N_2}^{1} - B = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1}{N_1-N_2}^{2} - C = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1}{N_1-N_2}^{3} - D = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1}{N_1-N_2}^{4} - E = 0.00000$$

$F = 0.95460$

$G = 0.63956$

$H = 0.42849$

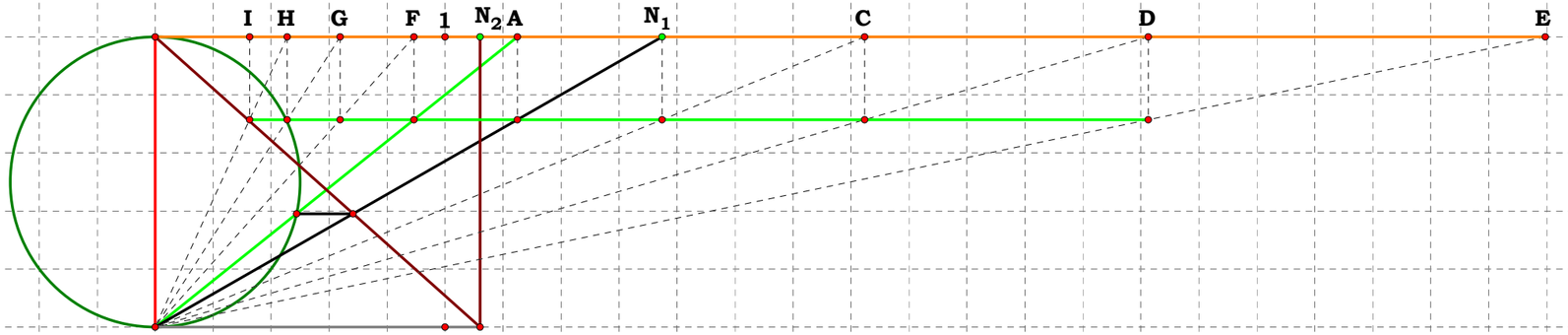
$I = 0.28708$

$$\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1}{N_1-N_2}^{-1} - F = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1}{N_1-N_2}^{-2} - G = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1}{N_1-N_2}^{-3} - H = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1}{N_1-N_2}^{-4} - I = 0.00000$$



$\sqrt{\frac{N_1}{N_2}} = 1.24930$

$\sqrt{N_1 \cdot N_2} = 1.39967$

$N_2 = 1.12036$

$A = 1.24930$

$N_1 = 1.74861$

$C = 2.44748$

$D = 3.42566$

$E = 4.79479$

$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{0} - A = 0.00000$

$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{1} - N_1 = 0.00000$

$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{2} - C = 0.00000$

$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{3} - D = 0.00000$

$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{4} - E = 0.00000$

$F = 0.89257$

$G = 0.63770$

$H = 0.45561$

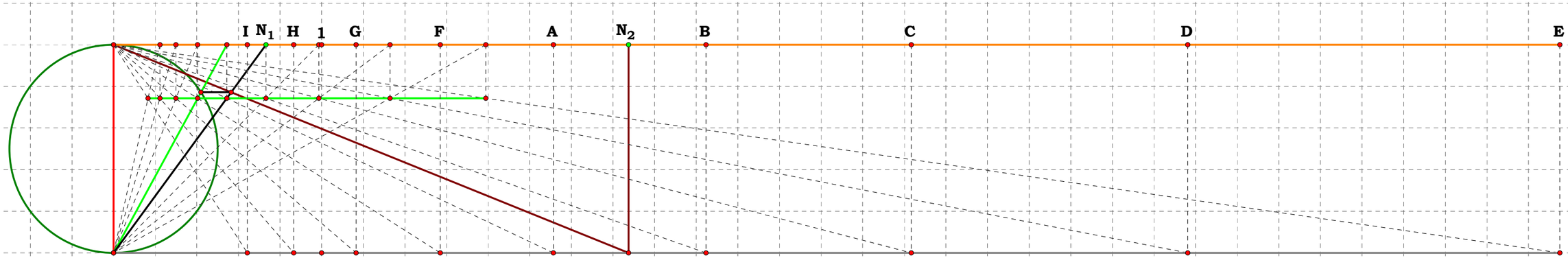
$I = 0.32551$

$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{-1} - F = 0.00000$

$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{-2} - G = 0.00000$

$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{-3} - H = 0.00000$

$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{-4} - I = 0.00000$



$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} = 2.11403$

$\sqrt{N_1 \cdot N_2} = 1.34658$

$N_1 = 0.73268$

$N_2 = 2.47486$

$A = 2.11403$

$B = 2.84670$

$C = 3.83331$

$D = 5.16185$

$E = 6.95084$

$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,0}} - A = 0.00000$

$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,1}} - B = 0.00000$

$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,2}} - C = 0.00000$

$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,3}} - D = 0.00000$

$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,4}} - E = 0.00000$

$F = 1.56992$

$G = 1.16586$

$H = 0.86580$

$I = 0.64296$

$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,-1}} - F = 0.00000$

$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,-2}} - G = 0.00000$

$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,-3}} - H = 0.00000$

$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,-4}} - I = 0.00000$

N[1] -> 0

N[1] -> 1

N[1] -> 2

N[1] -> 3

N[1] -> 4

N[1] -> 5

N[1] -> 6

N[1] -> 7

N[1] -> 8

N[1] -> 9

N[1] -> 10

N[1] -> 11

N[2] -> 0

N[2] -> 1

N[2] -> 2

N[2] -> 3

N[2] -> 4

N[2] -> 5

N[2] -> 6

N[2] -> 7

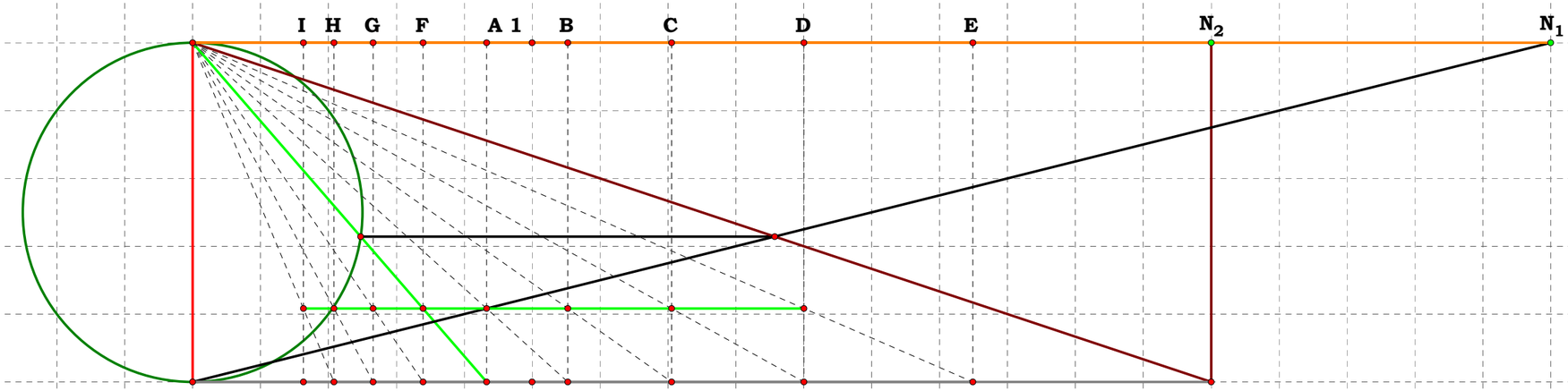
N[2] -> 8

N[2] -> 9

N[2] -> 10

N[2] -> 11

Hide Action Buttons



$\sqrt{\frac{N_2}{N_1}} = 0.86603$

$\frac{B}{A} = 1.27633$

$N_1 = 4.00000$

$N_2 = 3.00000$

$\frac{N_2}{N_1} = 0.75000$

A = 0.86603

B = 1.10534

C = 1.41078

D = 1.80063

E = 2.29820

$\sqrt{\frac{N_2}{N_1}} - A = 0.00000$

$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B}{A} - B = 0.00000$

$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^2}{A} - C = 0.00000$

$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^3}{A} - D = 0.00000$

$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^4}{A} - E = 0.00000$

F = 0.67853

G = 0.53162

H = 0.41652

I = 0.32634

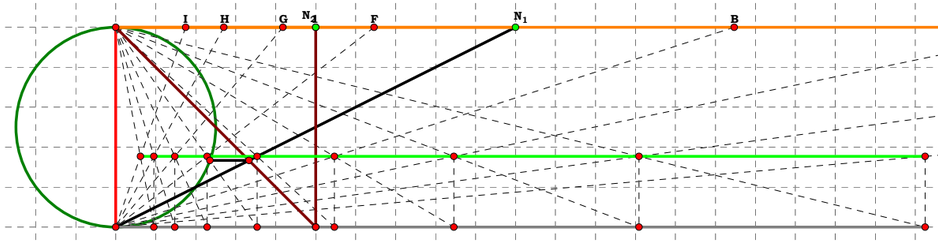
$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^{-1}}{A} - F = 0.00000$

$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^{-2}}{A} - G = 0.00000$

$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^{-3}}{A} - H = 0.00000$

$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^{-4}}{A} - I = 0.00000$

N[1] -> 0
N[1] -> 1
N[1] -> 2
N[1] -> 3
N[1] -> 4
N[1] -> 5
N[1] -> 6
N[1] -> 7
N[1] -> 8
N[1] -> 9
N[1] -> 10
N[1] -> 11
N[2] -> 0
N[2] -> 1
N[2] -> 2
N[2] -> 3
N[2] -> 4
N[2] -> 5
N[2] -> 6
N[2] -> 7
N[2] -> 8
N[2] -> 9
N[2] -> 10
N[2] -> 11
Hide Action Buttons



$\frac{C}{B}$ = 1.54692

$\frac{D}{C}$ = 1.54692

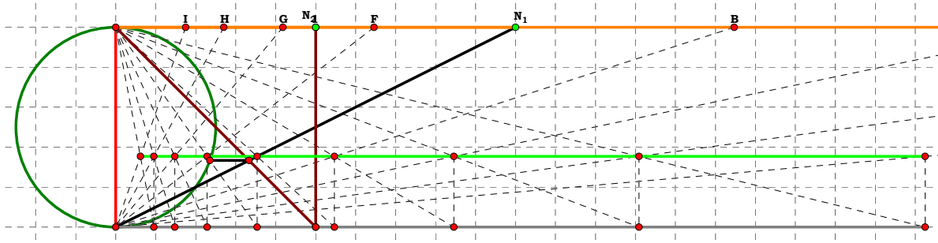
$\sqrt{2}$ = 1.41421

N_1 = 2.00000

N_2 = 1.00000

B = 3.09384
C = 4.78591
D = 7.40341
E = 11.45247
F = 1.29289
G = 0.83579
H = 0.54029
I = 0.34927

N[1] -> 0
N[1] -> 1
N[1] -> 2
N[1] -> 3
N[1] -> 4
N[1] -> 5
N[1] -> 6
N[1] -> 7
N[1] -> 8
N[1] -> 9
N[1] -> 10
N[1] -> 11
N[2] -> 0
N[2] -> 1
N[2] -> 2
N[2] -> 3
N[2] -> 4
N[2] -> 5
N[2] -> 6
N[2] -> 7
N[2] -> 8
N[2] -> 9
N[2] -> 10
N[2] -> 11
Hide Action Buttons



$\frac{C}{B}$ = 1.54692

$\frac{D}{C}$ = 1.54692

$\sqrt{2}$ = 1.41421

N_1 = 2.00000

N_2 = 1.00000

B = 3.09384
C = 4.78591
D = 7.40341
E = 11.45247
F = 1.29289
G = 0.83579
H = 0.54029
I = 0.34927

Index is Base 0

Indexs: $I_{ndx} = 1$ $C_{indx} = 13.00000$

Number of div. by difference at an index.

$$\frac{(I_{ndx} \cdot N_2 - N_1 \cdot N_3) \cdot ((I_{ndx} \cdot N_2 + N_2) - N_1 \cdot N_3)}{N_1 \cdot N_2} = 105.00000$$

Total number of fractions.

$$\frac{N_1 \cdot (N_3 - 1)}{N_2} = 14.00000 \qquad \frac{N_1 \cdot N_3 - N_1}{N_2} = 14.00000$$

Fraction at Index:

Num: $N_1 \cdot N_3 - I_{ndx} \cdot N_2 = 30.00000$

Den: $N_1 = 4.00000$

$$\frac{(N_1 \cdot N_3 - I_{ndx} \cdot N_2)}{N_1} = 7.50000$$

Fraction at Compliment:

$$\frac{N_1 + N_2 \cdot I_{ndx}}{N_1} = 1.50000$$

$$\frac{(N_1 \cdot N_3 - I_{ndx} \cdot N_2)}{N_1} + \frac{N_1 + N_2 \cdot I_{ndx}}{N_1} = 9.00000$$

N[1] -> 0 … N[1] -> 11

N[2] -> 0 … N[2] -> 11

$N_1 = 4.00000$

$N_2 = 2.00000$

$N_3 = 8.00000$

Present 2 Actions

$$\frac{N_3}{N_3 + 1} = 0.88889$$

N[2] -> 0 … N[2] -> 11

$$\frac{N_1 \cdot N_3 - N_1 - I_{ndx} \cdot N_2}{N_2} = 13.00000$$

$\frac{N_3}{1} = 8.00000$ $\frac{N_3}{H} = 4.00000$

$\frac{N_3}{A} = 7.50000$ $\frac{N_3}{I} = 3.50000$

$\frac{N_3}{B} = 7.00000$ $\frac{N_3}{J} = 3.00000$

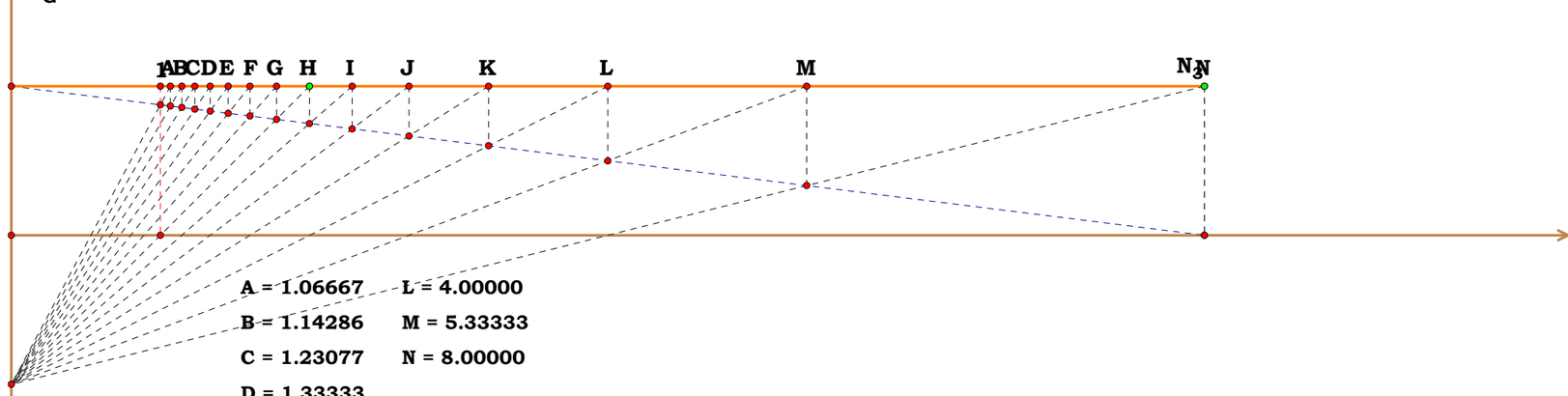
$\frac{N_3}{C} = 6.50000$ $\frac{N_3}{K} = 2.50000$

$\frac{N_3}{D} = 6.00000$ $\frac{N_3}{L} = 2.00000$

$\frac{N_3}{E} = 5.50000$ $\frac{N_3}{M} = 1.50000$

$\frac{N_3}{F} = 5.00000$ $\frac{N_3}{N} = 1.00000$

$\frac{N_3}{G} = 4.50000$



A = 1.06667 L = 4.00000

B = 1.14286 M = 5.33333

C = 1.23077 N = 8.00000

D = 1.33333

E = 1.45455

F = 1.60000

G = 1.77778

H = 2.00000

I = 2.28571

J = 2.66667

K = 3.20000

Indexs: Index = 0 $C_{indx} = 8.00$

Number of div. by difference at an index.

$$\frac{(\text{Index}\cdot(1-N_3)+N_1\cdot N_2\cdot N_3)\cdot((N_3+\text{Index}\cdot(1-N_3)+N_1\cdot N_2\cdot N_3)-1)}{N_1\cdot N_2\cdot(N_3-1)} = 81.14286$$

len of frac. $\frac{N_1\cdot N_2\cdot N_3}{N_1\cdot N_2\cdot N_3-\text{Index}\cdot(N_3-1)} = 1.00000$

Total number of fractions.

$N_1\cdot N_2 = 8.00000$

Fraction at Index:

Num: $N_1\cdot N_2\cdot N_3-\text{Index}\cdot(N_3-1) = 64.00000$

Den: $N_1\cdot N_2 = 8.00000$

$$\frac{(N_1\cdot N_2\cdot N_3-\text{Index}\cdot(N_3-1))}{(N_1\cdot N_2)} = 8.00000$$

Fraction at Compliment:

$$\frac{N_1\cdot N_2\cdot N_3-C_{indx}\cdot(N_3-1)}{N_1\cdot N_2} = 1.00000$$

$$\frac{(N_3-C_{indx}\cdot N_3-\text{Index}\cdot N_3)+2\cdot N_1\cdot N_2\cdot N_3}{N_1\cdot N_2} = 9.00000$$

N[1] -> 0
N[1] -> 1
N[1] -> 2
N[1] -> 3
N[1] -> 4
N[1] -> 5
N[1] -> 6
N[1] -> 7
N[1] -> 8
N[1] -> 9
N[1] -> 10
N[1] -> 11

N[2] -> 0
N[2] -> 1
N[2] -> 2
N[2] -> 3
N[2] -> 4
N[2] -> 5
N[2] -> 6
N[2] -> 7
N[2] -> 8
N[2] -> 9
N[2] -> 10
N[2] -> 11

$N_1 = 4.00000$
$N_2 = 2.00000$
$N_3 = 8.00000$

N[3] -> 0
N[3] -> 1
N[3] -> 2
N[3] -> 3
N[3] -> 4
N[3] -> 5
N[3] -> 6
N[3] -> 7
N[3] -> 8
N[3] -> 9
N[3] -> 10
N[3] -> 11

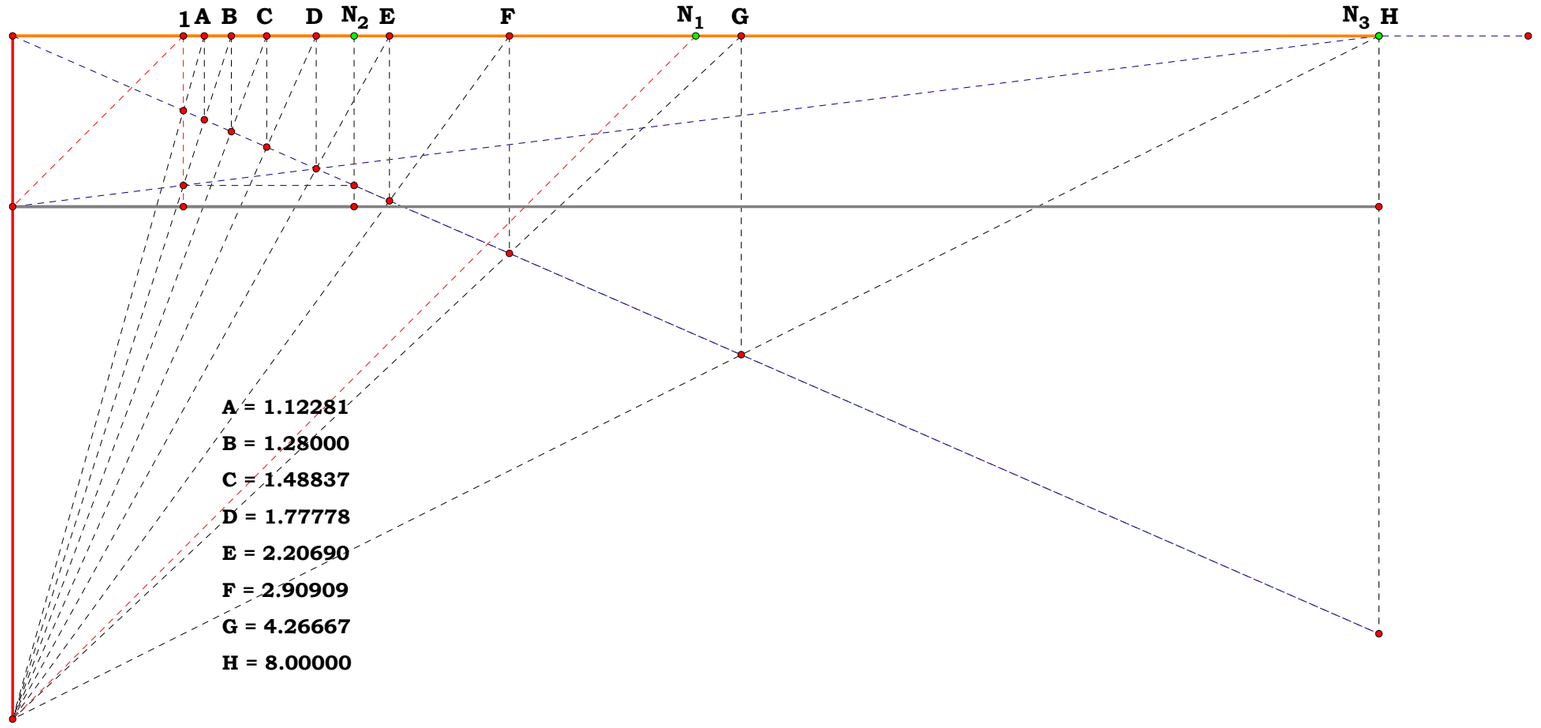
$\frac{N_3}{1} = 8.00000$ $\frac{N_3}{E} = 3.62500$

$\frac{N_3}{A} = 7.12500$ $\frac{N_3}{F} = 2.75000$

$\frac{N_3}{B} = 6.25000$ $\frac{N_3}{G} = 1.87500$

$\frac{N_3}{C} = 5.37500$ $\frac{N_3}{H} = 1.00000$

$\frac{N_3}{D} = 4.50000$



A = 1.12281
B = 1.28000
C = 1.48837
D = 1.77778
E = 2.20690
F = 2.90909
G = 4.26667
H = 8.00000

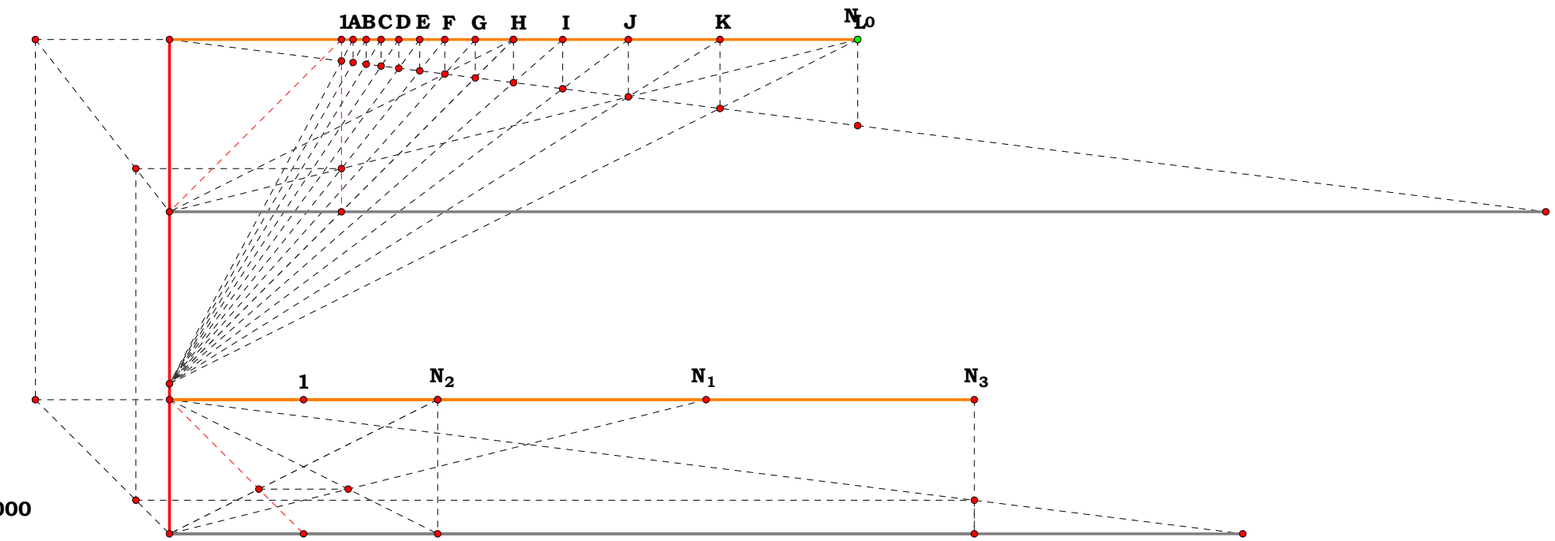
$$i_{dx} = 1$$

$$\frac{(i_{dx}\cdot(N_2-N_0\cdot N_2)+N_0\cdot N_1\cdot N_3)\cdot(((N_2-i_{dx}\cdot N_2-N_0\cdot N_2)+i_{dx}\cdot N_0\cdot N_2)-N_0\cdot N_1\cdot N_3)}{N_1\cdot N_3\cdot(((N_2+i_{dx}\cdot(N_2-N_0\cdot N_2))-i_{dx}\cdot N_2-N_0\cdot N_2)+i_{dx}\cdot N_0\cdot N_2)} = 60.00000$$

$$\frac{N_0\cdot N_1\cdot N_3}{i_{dx}\cdot(N_2-N_2\cdot N_0)+N_0\cdot N_1\cdot N_3} = 1.06667$$

$$\frac{N_1\cdot N_3-i_{dx}\cdot N_2\cdot(1-N_0)}{N_1\cdot N_3} = 1.25000$$

$$\frac{(i_{dx}\cdot(N_2-N_0\cdot N_2)+N_0\cdot N_1\cdot N_3)}{(N_1\cdot N_3)}+\frac{N_1\cdot N_3-i_{dx}\cdot N_2\cdot(1-N_0)}{N_1\cdot N_3} = 5.00000$$



Total number of fractions.

$$\frac{N_1\cdot N_3}{N_2} = 12.00000$$

Fraction at Index:

Num: $i_{dx}\cdot(N_2-N_0\cdot N_2)+N_0\cdot N_1\cdot N_3 = 90.00000$

Den: $N_1\cdot N_3 = 24.00000$

$$\frac{(i_{dx}\cdot(N_2-N_0\cdot N_2)+N_0\cdot N_1\cdot N_3)}{(N_1\cdot N_3)} = 3.75000$$

$N_0 = 4.00000$ $N_2 = 2.00000$

$N_1 = 4.00000$ $N_3 = 6.00000$ $N_1\cdot N_3 = 24.00000$

N[1] -> 0	N[2] -> 0	N[3] -> 0	N [0] -> 0
N[1] -> 1	N[2] -> 1	N[3] -> 1	N [0] -> 1
N[1] -> 2	N[2] -> 2	N[3] -> 2	N [0] -> 2
N[1] -> 3	N[2] -> 3	N[3] -> 3	N [0] -> 3
N[1] -> 4	N[2] -> 4	N[3] -> 4	N [0] -> 4
N[1] -> 5	N[2] -> 5	N[3] -> 5	N [0] -> 5
N[1] -> 6	N[2] -> 6	N[3] -> 6	N [0] -> 6
N[1] -> 7	N[2] -> 7	N[3] -> 7	N [0] -> 7
N[1] -> 8	N[2] -> 8	N[3] -> 8	N [0] -> 8
N[1] -> 9	N[2] -> 9	N[3] -> 9	N [0] -> 9
N[1] -> 10	N[2] -> 10	N[3] -> 10	N [0]-> 10
N[1] -> 11	N[2] -> 11	N[3] -> 11	N [0] -> 11

A = 1.06667
B = 1.14286
C = 1.23077
D = 1.33333
E = 1.45455
F = 1.60000
G = 1.77778
H = 2.00000
I = 2.28571
J = 2.66667
K = 3.20000
L = 4.00000

$\frac{N_0}{A} = 3.75000$ $\frac{N_0}{G} = 2.25000$

$\frac{N_0}{B} = 3.50000$ $\frac{N_0}{H} = 2.00000$

$\frac{N_0}{C} = 3.25000$ $\frac{N_0}{I} = 1.75000$

$\frac{N_0}{D} = 3.00000$ $\frac{N_0}{J} = 1.50000$

$\frac{N_0}{E} = 2.75000$ $\frac{N_0}{K} = 1.25000$

$\frac{N_0}{F} = 2.50000$ $\frac{N_0}{L} = 1.00000$

N -> 0
N -> 1
N -> 2
N -> 3
N -> 4
N -> 5
N -> 6
N -> 7
N -> 8
N -> 9
N -> 10
N -> 11
N = 2.00000
Show Objects

$In_{dx} = 1$

1 A B C D N E

$\frac{N^3}{(N^3-N)+1} = 1.14286$

$\frac{N^3}{N^3-In_{dx}\cdot(N-1)} = 1.14286$

$N^3 = 8.00000$

$N^3-In_{dx}\cdot(N-1) = 7.00000$

$N^2 = 4.00000$

$x_A = 1.14286$

$x_B = 1.33333$

$x_C = 1.60000$

$x_D = 2.00000$

$x_E = 2.66667$

Circle | Points
Show Lines | Hide Objects

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Circle | Points
Show Lines | Hide Objects

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Circle | Points
Show Lines | Hide Objects

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Circle | Points
Show Lines | Hide Objects

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

$N_1 = 5.00000$

$N_2 = 0.00000$

$n_a = 7.00000$

$n_b = 5.00000$

$r_{da} = 1.40000$

$\frac{n_a}{n_b} = 1.40000$

$N_1 \cdot \frac{n_a}{n_b} = 7.00000$

$n_c = 3.00000$

$n_d = 4.00000$

$r_{db} = 0.75000$

$\frac{n_c}{n_d} = 0.75000$

$\frac{n_c}{n_d} \cdot N_1 = 3.75000$

$In_{dx} = 0$

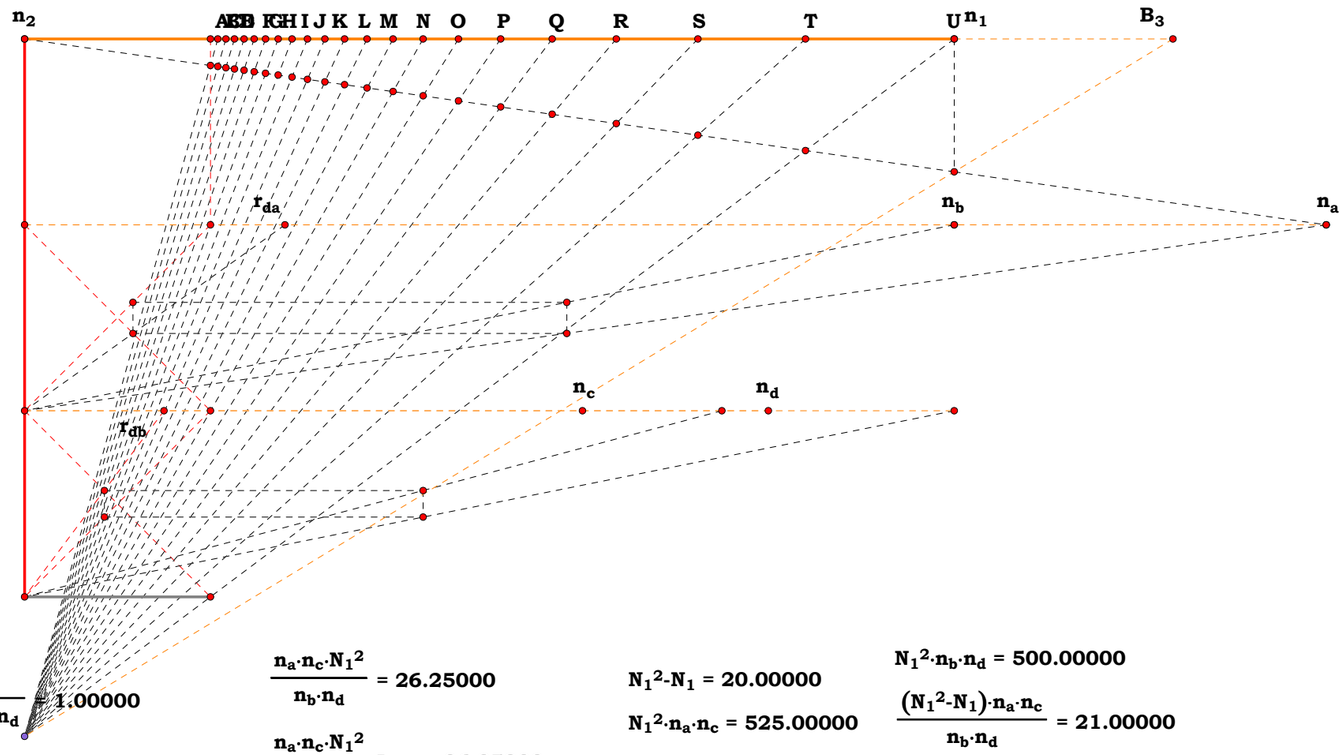
$\frac{26.25000}{26.25000} = 1.00000$

$B_3 = 6.17647$

$\frac{N_1}{B_3 - N_1} + 1 = 5.25000$

$\frac{7}{3.75} = 1.86667$

A = 1.03960
B = 1.08247
C = 1.12903
D = 1.17978
E = 1.23529
F = 1.29630
G = 1.36364
H = 1.43836
I = 1.52174
J = 1.61538
K = 1.72131
L = 1.84211
M = 1.98113
N = 2.14286
O = 2.33333
P = 2.56098
Q = 2.83784
R = 3.18182
S = 3.62069
T = 4.20000
U = 5.00000



$\frac{N_1^2 \cdot n_a \cdot n_c}{N_1^2 \cdot n_a \cdot n_c - In_{dx} \cdot n_b \cdot n_d} = 1.00000$

$\frac{n_a \cdot n_c \cdot N_1^2}{n_b \cdot n_d} = 26.25000$

$\frac{n_a \cdot n_c \cdot N_1^2}{n_b \cdot n_d} - In_{dx} = 26.25000$

$N_1^2 - N_1 = 20.00000$

$N_1^2 \cdot n_a \cdot n_c = 525.00000$

$N_1^2 \cdot n_b \cdot n_d = 500.00000$

$\frac{(N_1^2 - N_1) \cdot n_a \cdot n_c}{n_b \cdot n_d} = 21.00000$

Circle
Hide Lines
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

$N_1 = 2.00000$

$N_2 = -0.91098$

Points
Hide Objects

n_2

n_1

A

B

$x_A = 1.33333$

$x_B = 2.00000$

$$\frac{N_1^2}{(N_1^2-N_1)+1} = 1.33333$$

$t_1 = 2$

$$\frac{N_1^2}{N_1^2-t_1\cdot(N_1-1)} = 2.00000$$

Circle

Hide Lines

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

$t_2 = 1.00000$

$N_1 \cdot (N_1 - 1) + 1 = 7.00000$

$N_1^3 - N_1 \cdot (N_1 - 1) = 21.00000$

$N_1^3 - (N_1 - 1) \cdot (N_1 + t_2) = 19.00000$

$x_I = 1.10526$

$x_J = 1.23529$

$x_K = 1.40000$

$x_L = 1.61538$

$x_M = 1.90909$

$x_N = 2.33333$

$x_O = 3.00000$

$x_P = 4.20000$

$x_Q = 7.00000$

$x_R = 21.00000$

$x_S = -21.00000$

$x_T = -7.00000$

$x_U = -4.20000$

n_2

n_1

I J A K L M N O

$N_1 = 3.00000$

$N_2 = -0.84352$

Points

Hide Objects

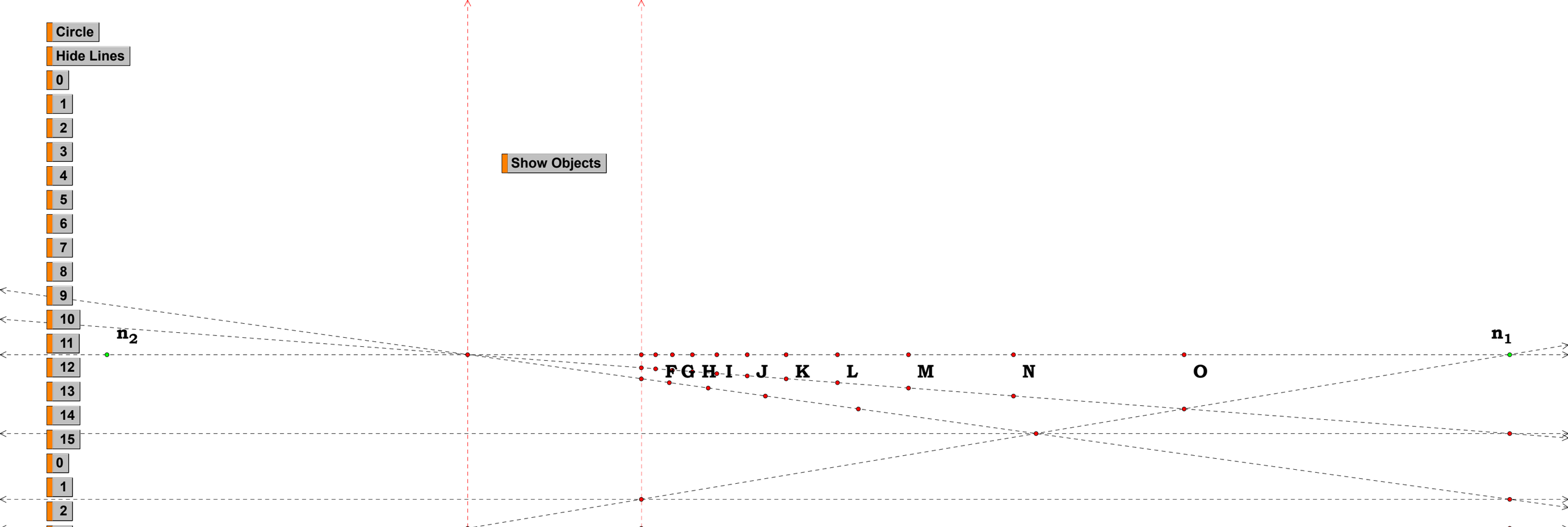
$$\frac{(N_1^3 - N_1 \cdot (N_1 - 1))}{(N_1^3 - (N_1 - 1) \cdot (N_1 + t_2))} = 1.10526$$

Circle

Hide Lines

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Show Objects



$N_1 = 6.00000$

$N_2 = -2.07732$

Points

Hide Objects

$$\frac{N_1^2}{(N_1^2 - I_{ndx}\cdot(N_1-1))} = 3.27273$$

$x_A = 1.16129$

$x_B = 1.38462$

$x_C = 1.71429$

$x_D = 2.25000$

$x_E = 3.27273$

$I_{ndx} = 5$

$N_1^2 - I_{ndx}\cdot(N_1-1) = 11.00000$

$x_F = 1.08197$

$x_G = 1.17857$

$x_H = 1.29412$

$x_I = 1.43478$

$x_J = 1.60976$

$x_K = 1.83333$

$x_L = 2.12903$

$x_M = 2.53846$

$x_N = 3.14286$

$x_O = 4.12500$

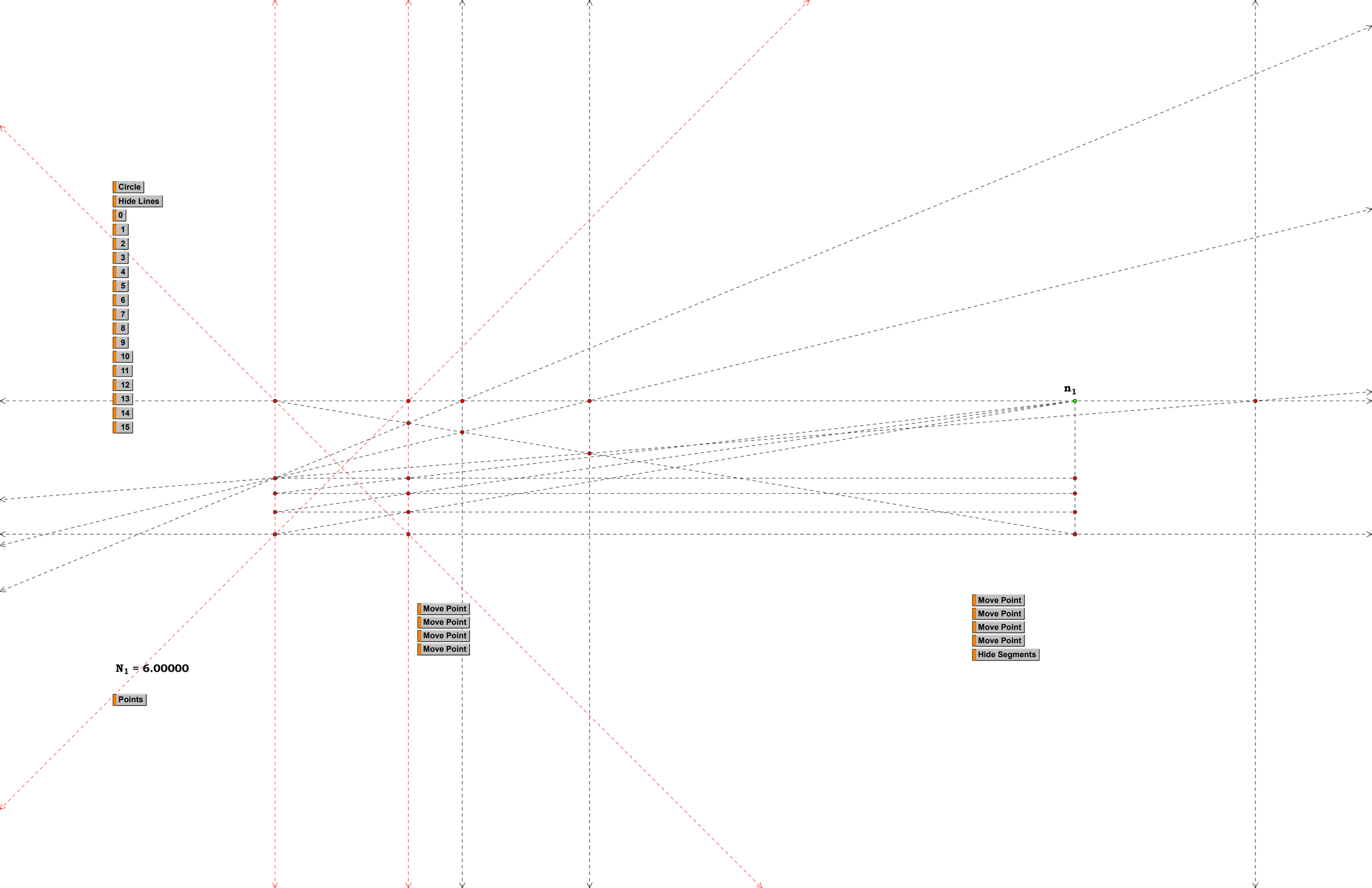
$N_1^2 + N_1\cdot(N_1-1) = 66.00000$

$2\cdot N_1 - 1 = 11.00000$

$$\frac{(N_1^2 + N_1\cdot(N_1-1))}{(N_1^2 + (N_1-1)\cdot(N_1 - I_{ndx}))} = 1.60976$$

$N_1^2 + (N_1-1)\cdot(N_1 - I_{ndx}) = 41.00000$

$(N_1^2 + N_1\cdot(N_1-1)) - I_{ndx}\cdot(N_1-1) = 41.00000$


Circle
Hide Lines
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
n_1
Move Point
Move Point
Move Point
Move Point
Move Point
Move Point
Move Point
Move Point
Hide Segments
N_1 = 6.00000
Points

Circle
Show Lines
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Circle
Show Lines
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

$N_1 = 5.00000$

Points

Points

$I_{ndx} = 3$

$n_3 = 3.00000$

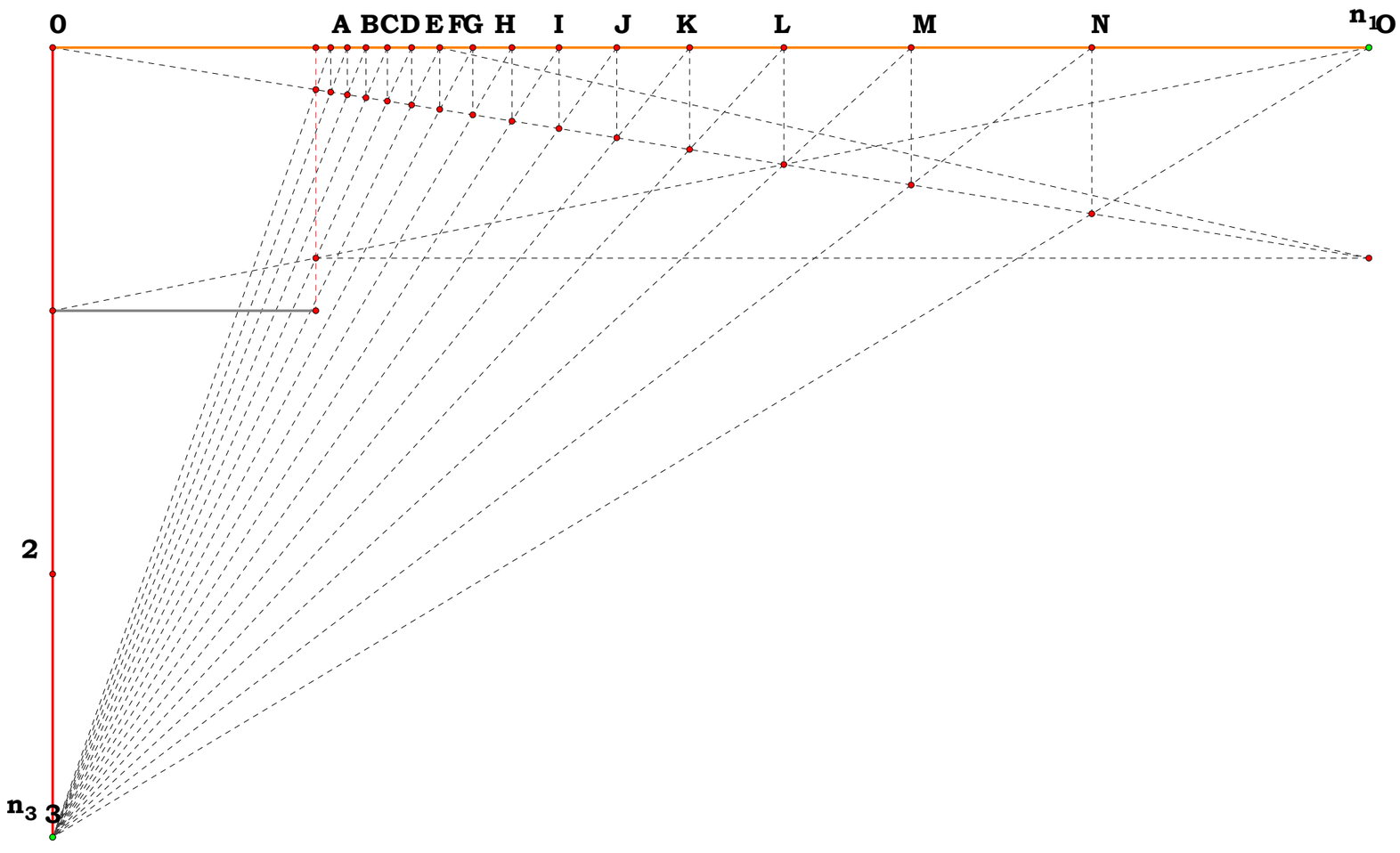
$N_1^2 \cdot n_3 = 75.00000$

$N_1^2 \cdot n_3 - I_{ndx} \cdot (N_1 - 1) = 63.00000$

$$\frac{(N_1^2 \cdot n_3)}{(N_1^2 \cdot n_3 - I_{ndx} \cdot (N_1 - 1))} = 1.19048$$

$N_1 \cdot n_3 = 15.00000$

$x_A = 1.05634$
$x_B = 1.11940$
$x_C = 1.19048$
$x_D = 1.27119$
$x_E = 1.36364$
$x_F = 1.47059$
$x_G = 1.59574$
$x_H = 1.74419$
$x_I = 1.92308$
$x_J = 2.14286$
$x_K = 2.41935$
$x_L = 2.77778$
$x_M = 3.26087$
$x_N = 3.94737$
$x_O = 5.00000$



Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.79400 cm

n_1 = 12.74233 cm

Hide Intersections

Show Lines

Hide Objects

Exponential Series

$0R_1$ = 3.57870 cm

R_1 = 1.28085

N_1 = 4.56061

$\frac{N_1}{N_1-1} - R_1 = 0.00000$

$\frac{N_1}{N_1-1}^{-3} - R_{-3} = 0.00000$

$\frac{N_1}{N_1-1}^{-2} - R_{-2} = 0.00000$

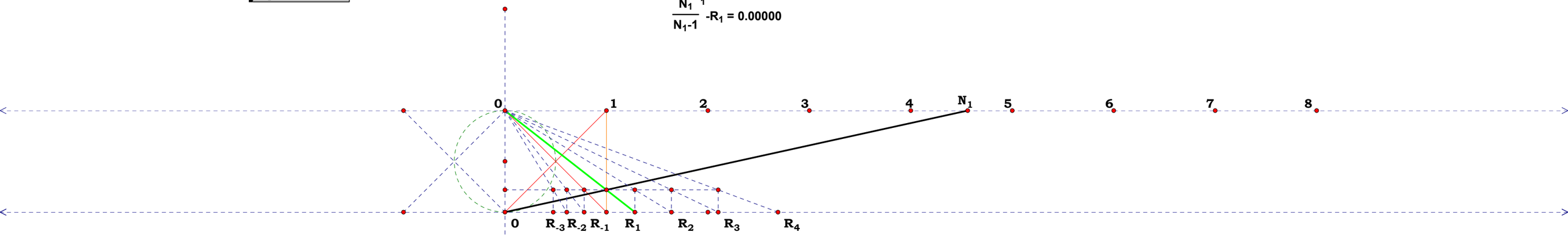
$\frac{N_1}{N_1-1}^{-1} - R_{-1} = 0.00000$

$\frac{N_1}{N_1-1}^{1} - R_1 = 0.00000$

$\frac{N_1}{N_1-1}^{2} - R_2 = 0.00000$

$\frac{N_1}{N_1-1}^{3} - R_3 = 0.00000$

$\frac{N_1}{N_1-1}^{4} - R_4 = 0.00000$



$\frac{R_{-2}}{R_{-3}} = 1.28085$

$\frac{N_1}{N_1-1} = 1.28085$

R_{-3} = 0.47589

R_{-2} = 0.60954

R_{-1} = 0.78073

R_2 = 1.64058

R_3 = 2.10134

R_4 = 2.69150

$0R_{-3}$ = 1.32963 cm

$0R_{-2}$ = 1.70306 cm

$0R_{-1}$ = 2.18136 cm

$0R_2$ = 4.58378 cm

$0R_3$ = 5.87114 cm

$0R_4$ = 7.52005 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.79400 cm

n_1 = 8.80533 cm

N_1 = 3.15152

$0R_1$ = 6.01133 cm

R_1 = 2.15152

N_1-R_1 = 1.00000

N_1-1-R_1 = 0.00000

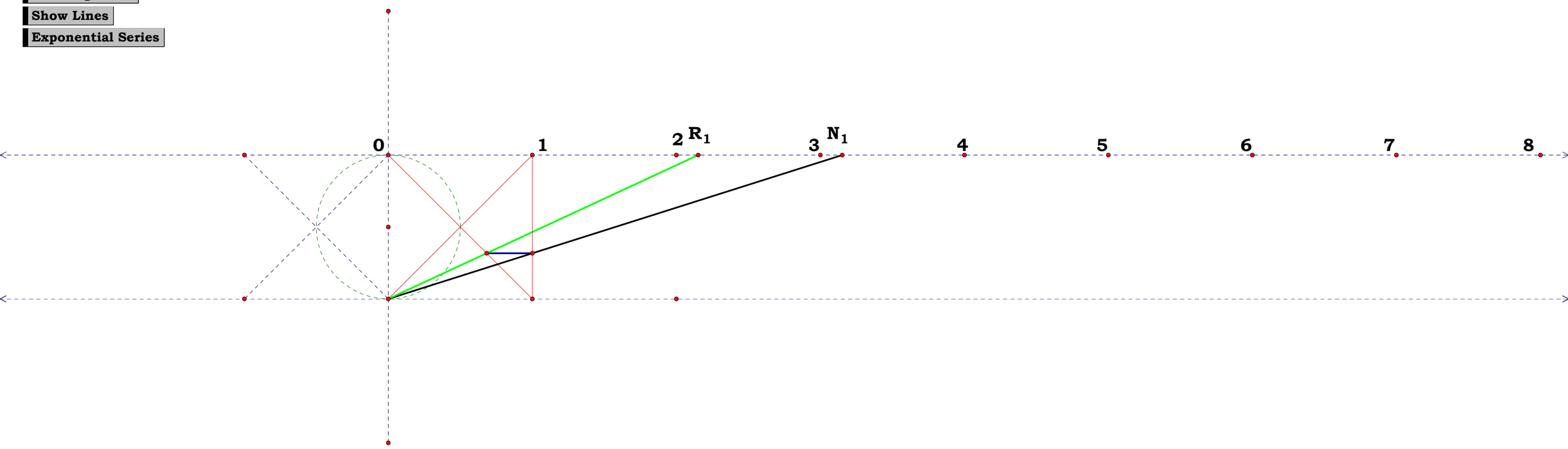
Hide Intersections

Hide Objects

Hide Segments

Show Lines

Exponential Series



Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.79400 cm

n_1 = 9.03817 cm

N_1 = 3.23485

Hide Intersections

Hide Segments

Show Lines

Show Objects

$0R_1$ = 1.93028 cm

R_1 = 0.69087

$\frac{N_1-1}{N_1} - R_1 = 0.00000$

$\frac{N_1-1}{N_1}^4 - R_4 = 0.00000$

$\frac{N_1-1}{N_1}^3 - R_3 = 0.00000$

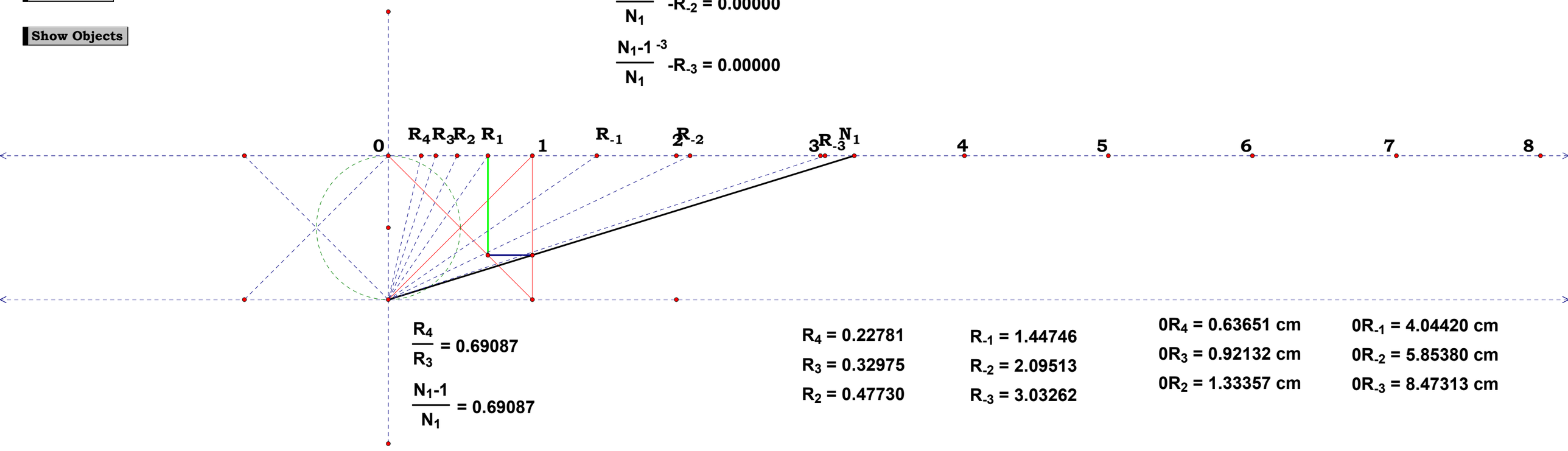
$\frac{N_1-1}{N_1}^2 - R_2 = 0.00000$

$\frac{N_1-1}{N_1}^1 - R_1 = 0.00000$

$\frac{N_1-1}{N_1}^{-1} - R_{-1} = 0.00000$

$\frac{N_1-1}{N_1}^{-2} - R_{-2} = 0.00000$

$\frac{N_1-1}{N_1}^{-3} - R_{-3} = 0.00000$



$\frac{R_4}{R_3} = 0.69087$

$\frac{N_1-1}{N_1} = 0.69087$

R_4 = 0.22781

R_3 = 0.32975

R_2 = 0.47730

R_{-1} = 1.44746

R_{-2} = 2.09513

R_{-3} = 3.03262

$0R_4$ = 0.63651 cm

$0R_3$ = 0.92132 cm

$0R_2$ = 1.33357 cm

$0R_{-1}$ = 4.04420 cm

$0R_{-2}$ = 5.85380 cm

$0R_{-3}$ = 8.47313 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.79400 cm

n_1 = 8.03338 cm

N_1 = 2.87523

Hide Intersections

Hide Objects

Hide Segments

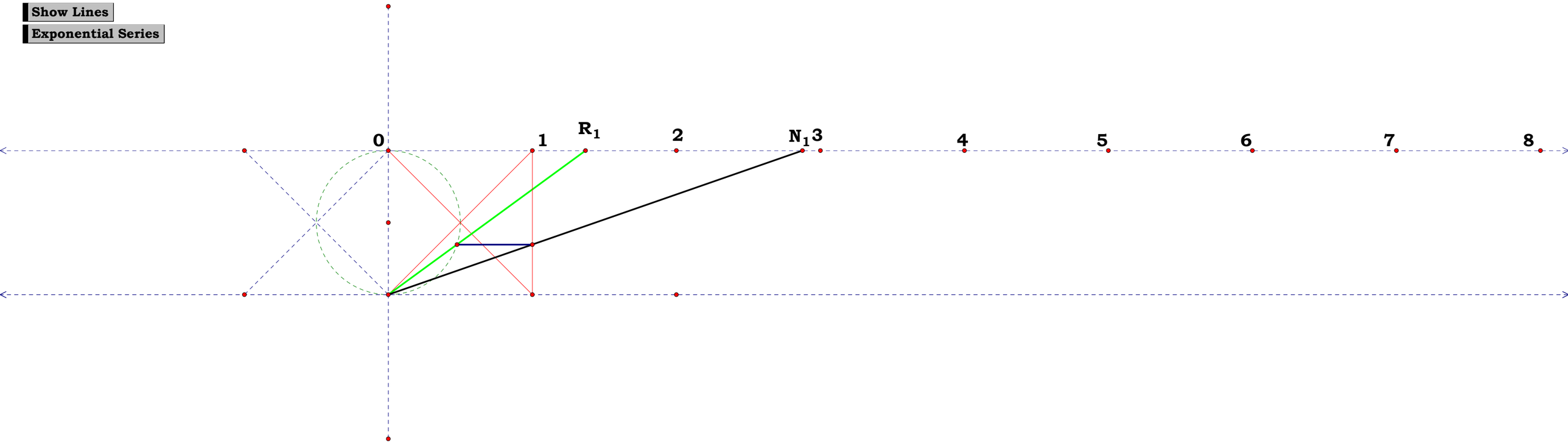
Show Lines

Exponential Series

$0R_1$ = 3.82607 cm

R_1 = 1.36939 $\sqrt{N_1-1}$ = 1.36939

$\sqrt{N_1-1}-R_1$ = 0.00000



Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.81517 cm

n_1 = 4.62741 cm

Hide Intersections

Hide Objects

Hide Segments

Show Lines

Exponential Series

$0R_1$ = 3.50871 cm

R_1 = 1.24636

N_1 = 1.64374

$\frac{1}{\sqrt{N_1-1}}-R_1 = 0.00000$

$\frac{1}{\sqrt{N_1-1}}^{-3} -R_{-3} = 0.00000$

$\frac{1}{\sqrt{N_1-1}}^{-2} -R_{-2} = 0.00000$

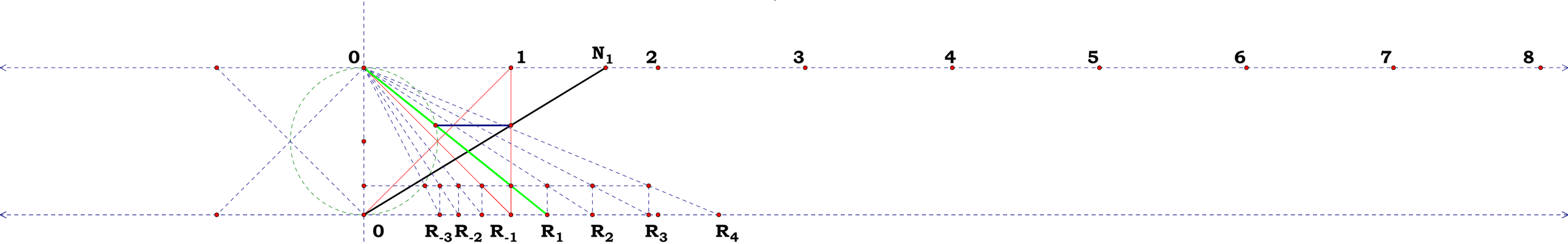
$\frac{1}{\sqrt{N_1-1}}^{-1} -R_{-1} = 0.00000$

$\frac{1}{\sqrt{N_1-1}}^{1} -R_1 = 0.00000$

$\frac{1}{\sqrt{N_1-1}}^{2} -R_2 = 0.00000$

$\frac{1}{\sqrt{N_1-1}}^{3} -R_3 = 0.00000$

$\frac{1}{\sqrt{N_1-1}}^{4} -R_4 = 0.00000$



$\frac{R_{-2}}{R_{-3}} = 1.24636$

$\frac{1}{\sqrt{N_1-1}} = 1.24636$

R_{-3} = 0.51650

R_{-2} = 0.64374

R_{-1} = 0.80234

R_2 = 1.55341

R_3 = 1.93611

R_4 = 2.41309

$0R_{-3}$ = 1.45403 cm

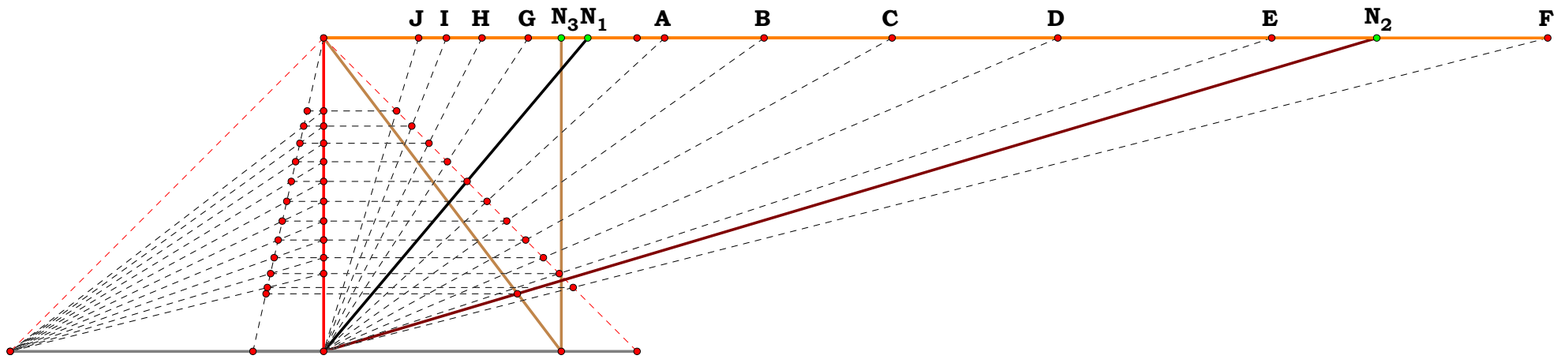
$0R_{-2}$ = 1.81225 cm

$0R_{-1}$ = 2.25871 cm

$0R_2$ = 4.37312 cm

$0R_3$ = 5.45048 cm

$0R_4$ = 6.79326 cm



$$\frac{N_1^{\frac{1}{4}} \cdot N_2^{\,4}}{N_2 - N_3} - D = 0.00000$$

$$\frac{N_1 \cdot N_2^{\,4}}{(N_2 - N_3)^4} - D = 0.00000$$

$$\frac{N_2}{N_2 - N_3} = 1.29123$$

$N_1 = 0.84255$

$N_2 = 3.35986$

$N_3 = 0.75780$

$A = 1.08792$ $G = 0.65251$

$B = 1.40476$ $H = 0.50534$

$C = 1.81388$ $I = 0.39136$

$D = 2.34214$ $J = 0.30309$

$E = 3.02425$

$F = 3.90501$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{1} \cdot N_1 - A = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{2} \cdot N_1 - B = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{3} \cdot N_1 - C = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{4} \cdot N_1 - D = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{5} \cdot N_1 - E = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{6} \cdot N_1 - F = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{-1} \cdot N_1 - G = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{-2} \cdot N_1 - H = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{-3} \cdot N_1 - I = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{-4} \cdot N_1 - J = 0.00000$$

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.81517 cm

n_1 = 4.89896 cm

Hide Intersections

Show Lines

Hide Segments

Hide Objects

Exponential Series

$0R_1$ = 3.80323 cm

R_1 = 1.35098

N_1 = 1.74020

$\frac{1}{N_1-1}-R_1 = 0.00000$

$\frac{1}{N_1-1}^{-3} -R_{-3} = 0.00000$

$\frac{1}{N_1-1}^{-2} -R_{-2} = 0.00000$

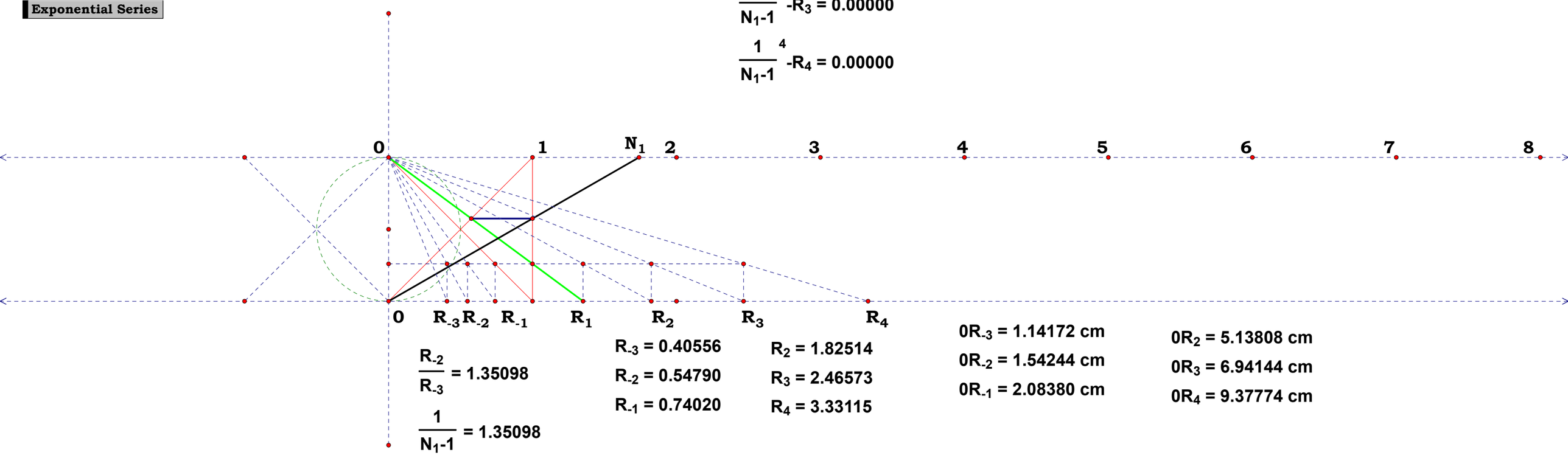
$\frac{1}{N_1-1}^{-1} -R_{-1} = 0.00000$

$\frac{1}{N_1-1}^{1} -R_1 = 0.00000$

$\frac{1}{N_1-1}^{2} -R_2 = 0.00000$

$\frac{1}{N_1-1}^{3} -R_3 = 0.00000$

$\frac{1}{N_1-1}^{4} -R_4 = 0.00000$



$\frac{R_{-2}}{R_{-3}} = 1.35098$

$\frac{1}{N_1-1} = 1.35098$

R_{-3} = 0.40556

R_{-2} = 0.54790

R_{-1} = 0.74020

R_2 = 1.82514

R_3 = 2.46573

R_4 = 3.33115

$0R_{-3}$ = 1.14172 cm

$0R_{-2}$ = 1.54244 cm

$0R_{-1}$ = 2.08380 cm

$0R_2$ = 5.13808 cm

$0R_3$ = 6.94144 cm

$0R_4$ = 9.37774 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.79400 cm

n_1 = 4.33917 cm

Hide Intersections

Hide Segments

Show Lines

$0R_1$ = 1.79906 cm

R_1 = 0.64390

N_1 = 1.55303

$\frac{1}{N_1}$ -R_1 = 0.00000

$\frac{1}{N_1}^{4}$ -R_4 = 0.00000

$\frac{1}{N_1}^{3}$ -R_3 = 0.00000

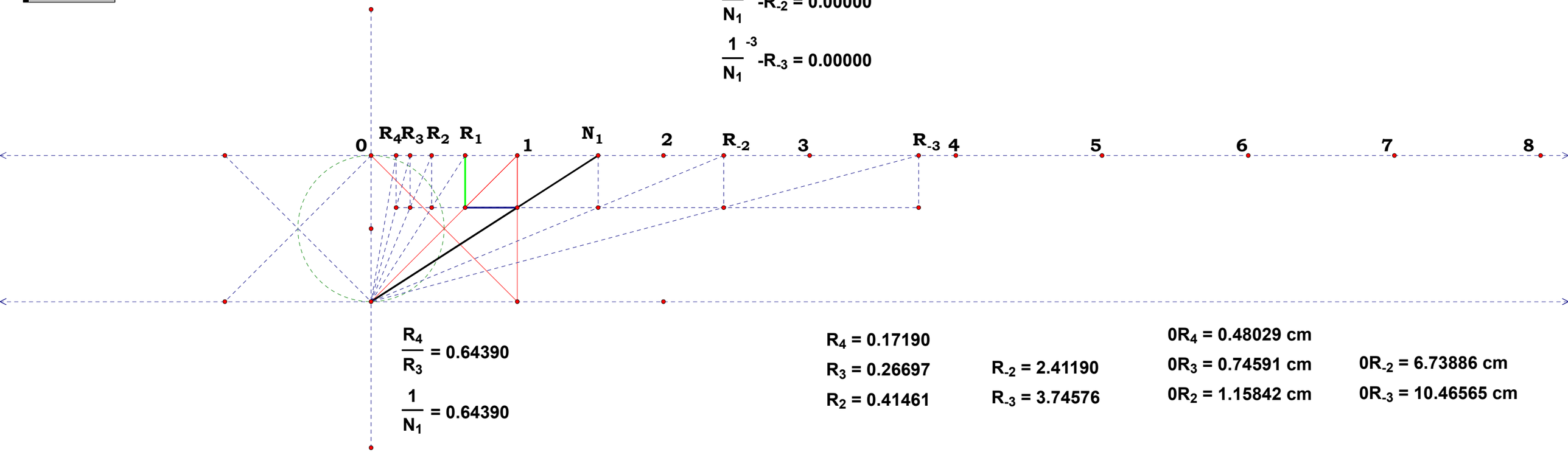
$\frac{1}{N_1}^{2}$ -R_2 = 0.00000

$\frac{1}{N_1}^{1}$ -R_1 = 0.00000

$\frac{1}{N_1}^{-1}$ -N_1 = 0.00000

$\frac{1}{N_1}^{-2}$ -R_{-2} = 0.00000

$\frac{1}{N_1}^{-3}$ -R_{-3} = 0.00000



$\frac{R_4}{R_3}$ = 0.64390

$\frac{1}{N_1}$ = 0.64390

R_4 = 0.17190

R_3 = 0.26697

R_2 = 0.41461

R_{-2} = 2.41190

R_{-3} = 3.74576

$0R_4$ = 0.48029 cm

$0R_3$ = 0.74591 cm

$0R_2$ = 1.15842 cm

$0R_{-2}$ = 6.73886 cm

$0R_{-3}$ = 10.46565 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.81517 cm

n_1 = 0.81277 cm

N_1 = 0.28871

Hide Intersections

Hide Objects

Show Lines

Exponential Series

$0R_1$ = 3.62793 cm

R_1 = 1.28871

$(N_1+1)-R_1$ = 0.00000

$(N_1+1)^{-3}-R_{-3}$ = 0.00000

$(N_1+1)^{-2}-R_{-2}$ = 0.00000

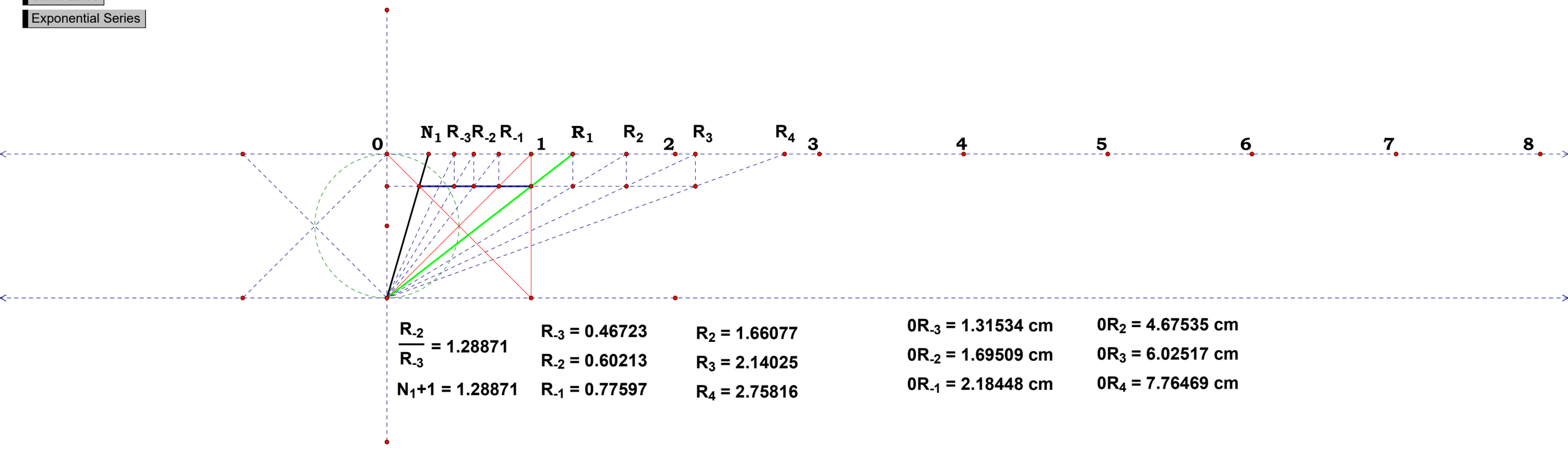
$(N_1+1)^{-1}-R_{-1}$ = 0.00000

$(N_1+1)^{1}-R_1$ = 0.00000

$(N_1+1)^{2}-R_2$ = 0.00000

$(N_1+1)^{3}-R_3$ = 0.00000

$(N_1+1)^{4}-R_4$ = 0.00000



$\frac{R_{-2}}{R_{-3}}$ = 1.28871

N_1+1 = 1.28871

R_{-3} = 0.46723

R_{-2} = 0.60213

R_{-1} = 0.77597

R_2 = 1.66077

R_3 = 2.14025

R_4 = 2.75816

$0R_{-3}$ = 1.31534 cm

$0R_{-2}$ = 1.69509 cm

$0R_{-1}$ = 2.18448 cm

$0R_2$ = 4.67535 cm

$0R_3$ = 6.02517 cm

$0R_4$ = 7.76469 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.77283 cm

n_1 = 7.11974 cm

Hide Intersections

Show Lines

Hide Objects

Exponential Series

$0R_1$ = 3.85273 cm

R_1 = 1.38946

N_1 = 2.56768

$\frac{N_1+1}{N_1} - R_1 = 0.00000$

$\frac{N_1+1}{N_1}^{-3} - R_{-3} = 0.00000$

$\frac{N_1+1}{N_1}^{-2} - R_{-2} = 0.00000$

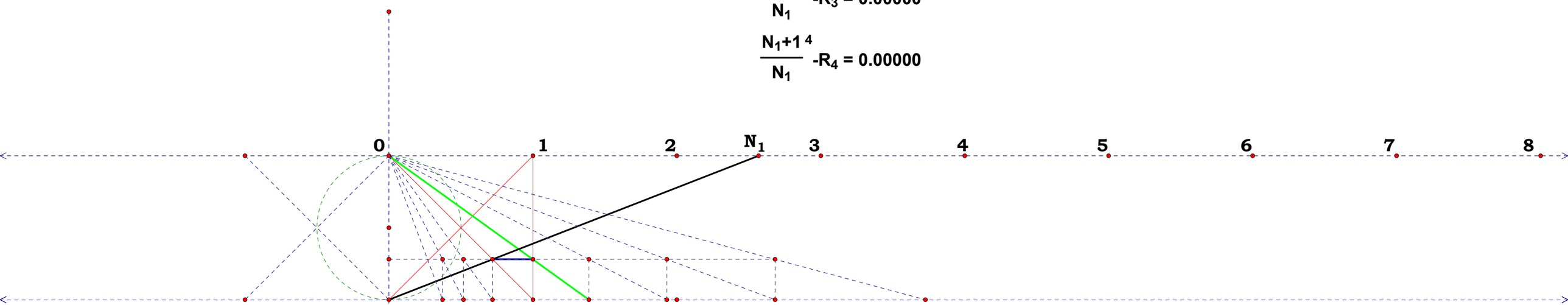
$\frac{N_1+1}{N_1}^{-1} - R_{-1} = 0.00000$

$\frac{N_1+1}{N_1}^{1} - R_1 = 0.00000$

$\frac{N_1+1}{N_1}^{2} - R_2 = 0.00000$

$\frac{N_1+1}{N_1}^{3} - R_3 = 0.00000$

$\frac{N_1+1}{N_1}^{4} - R_4 = 0.00000$



$\frac{R_{-2}}{R_{-3}} = 1.38946$

$\frac{N_1+1}{N_1} = 1.38946$

R_{-3} = 0.37279

R_{-2} = 0.51798

R_{-1} = 0.71971

R_2 = 1.93059

R_3 = 2.68247

R_4 = 3.72718

$0R_{-3}$ = 1.03369 cm

$0R_{-2}$ = 1.43626 cm

$0R_{-1}$ = 1.99562 cm

$0R_2$ = 5.35321 cm

$0R_3$ = 7.43805 cm

$0R_4$ = 10.33485 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.77283 cm

n_1 = 8.10683 cm

Hide Intersections

Show Lines

Hide Segments

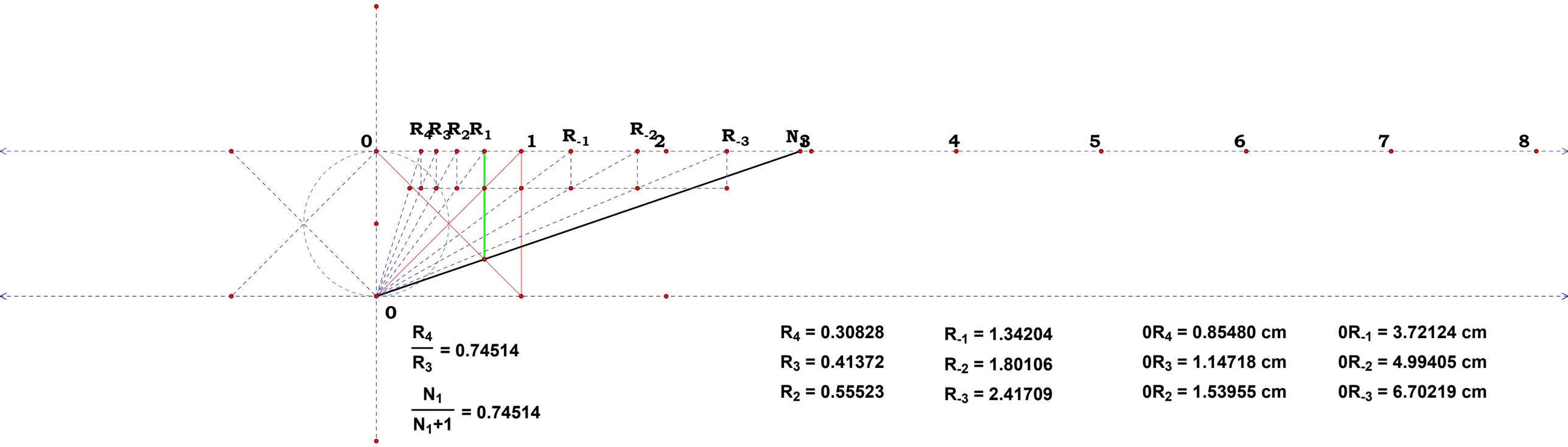
$0R_1$ = 2.06614 cm

R_1 = 0.74514

N_1 = 2.92366

$\frac{N_1}{N_1+1} - R_1 = 0.00000$

$\frac{N_1}{N_1+1}^4 - R_4 = 0.00000$



$\frac{R_4}{R_3} = 0.74514$

$\frac{N_1}{N_1+1} = 0.74514$

R_4 = 0.30828

R_3 = 0.41372

R_2 = 0.55523

R_{-1} = 1.34204

R_{-2} = 1.80106

R_{-3} = 2.41709

$0R_4$ = 0.85480 cm

$0R_3$ = 1.14718 cm

$0R_2$ = 1.53955 cm

$0R_{-1}$ = 3.72124 cm

$0R_{-2}$ = 4.99405 cm

$0R_{-3}$ = 6.70219 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.83633 cm

n_1 = 6.91100 cm

Hide Intersections

Show Lines

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Exponential Series

$0R_1$ = 4.42740 cm

R_1 = 1.56096

N_1 = 2.43660

$\sqrt{N_1}-R_1$ = 0.00000

$\sqrt{N_1^{-3}}-R_{-3}$ = 0.00000

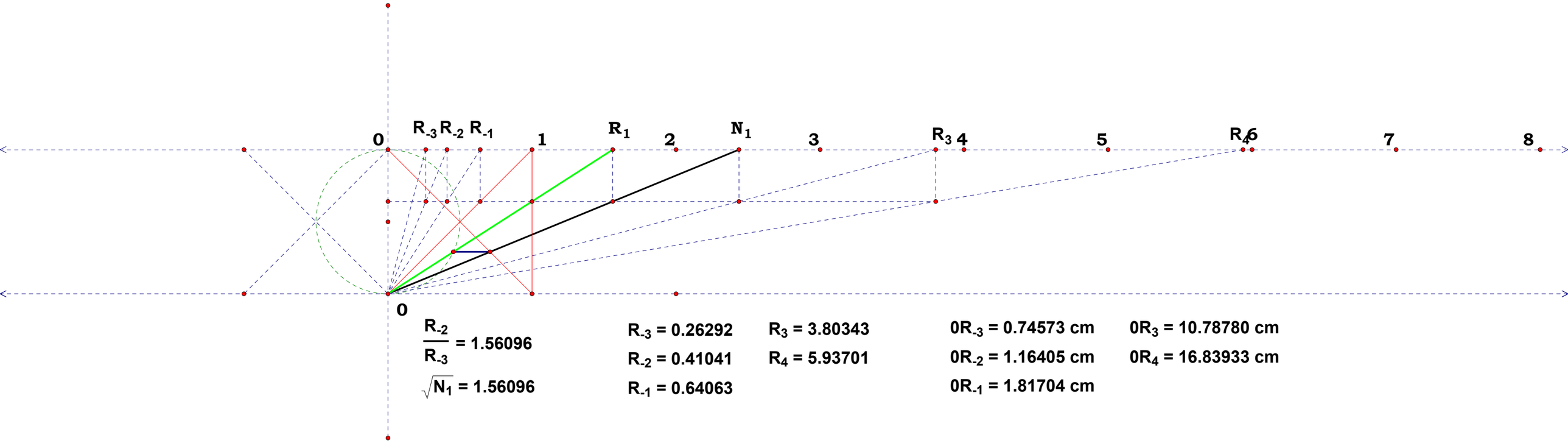
$\sqrt{N_1^{-2}}-R_{-2}$ = 0.00000

$\sqrt{N_1^{-1}}-R_{-1}$ = 0.00000

$\sqrt{N_1^{2}}-N_1$ = 0.00000

$\sqrt{N_1^{3}}-R_3$ = 0.00000

$\sqrt{N_1^{4}}-R_4$ = 0.00000



$\frac{R_{-2}}{R_{-3}}$ = 1.56096

$\sqrt{N_1}$ = 1.56096

R_{-3} = 0.26292

R_{-2} = 0.41041

R_{-1} = 0.64063

R_3 = 3.80343

R_4 = 5.93701

$0R_{-3}$ = 0.74573 cm

$0R_{-2}$ = 1.16405 cm

$0R_{-1}$ = 1.81704 cm

$0R_3$ = 10.78780 cm

$0R_4$ = 16.83933 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.79400 cm

n_1 = 1.60557 cm

Hide Intersections

Show Lines

Hide Objects

Exponential Series

$0R_1$ = 3.68574 cm

R_1 = 1.31916

N_1 = 0.57465

$\frac{1}{\sqrt{N_1}}$ -R_1 = 0.00000

$\frac{1}{\sqrt{N_1}}^{-3}$ -R_{-3} = 0.00000

$\frac{1}{\sqrt{N_1}}^{-2}$ -R_{-2} = 0.00000

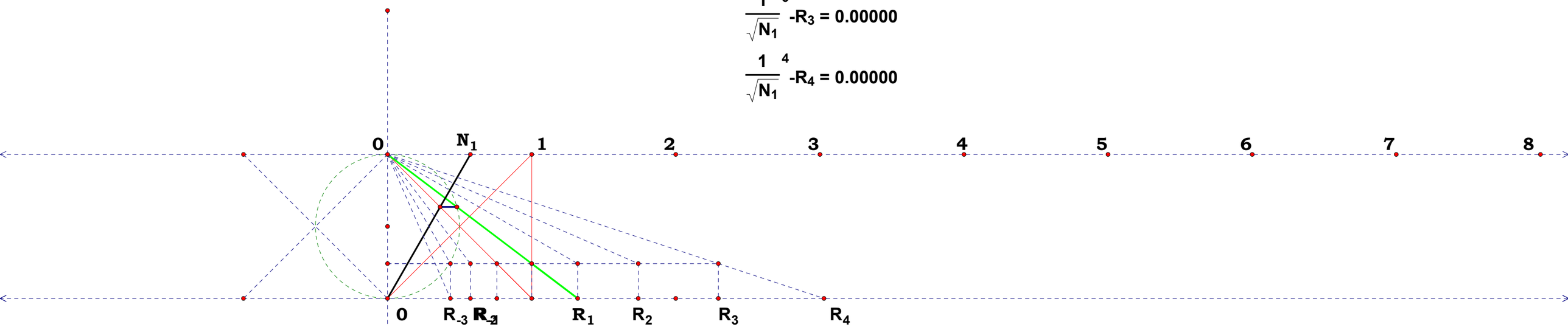
$\frac{1}{\sqrt{N_1}}^{-1}$ -R_{-1} = 0.00000

$\frac{1}{\sqrt{N_1}}^{1}$ -R_1 = 0.00000

$\frac{1}{\sqrt{N_1}}^{2}$ -R_2 = 0.00000

$\frac{1}{\sqrt{N_1}}^{3}$ -R_3 = 0.00000

$\frac{1}{\sqrt{N_1}}^{4}$ -R_4 = 0.00000



$\frac{R_{-2}}{R_{-3}}$ = 1.31916

$\frac{1}{\sqrt{N_1}}$ = 1.31916

R_{-3} = 0.43562

R_{-2} = 0.57465

R_{-1} = 0.75806

R_2 = 1.74019

R_3 = 2.29560

R_4 = 3.02827

$0R_{-3}$ = 1.21711 cm

$0R_{-2}$ = 1.60557 cm

$0R_{-1}$ = 2.11801 cm

$0R_2$ = 4.86210 cm

$0R_3$ = 6.41390 cm

$0R_4$ = 8.46099 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.79400 cm

n_1 = 4.29683 cm

Hide Intersections

Show Lines

Hide Segments

Show Objects

Hide Objects

Exponential Series

$0R_1$ = 1.36526 cm

R_1 = 0.48864

N_1 = 1.53788

$\frac{\sqrt{N_1}}{N_1+1} - R_1 = 0.00000$

$\frac{\sqrt{N_1}^{\,4}}{N_1+1} - R_4 = 0.00000$

$\frac{\sqrt{N_1}^{\,3}}{N_1+1} - R_3 = 0.00000$

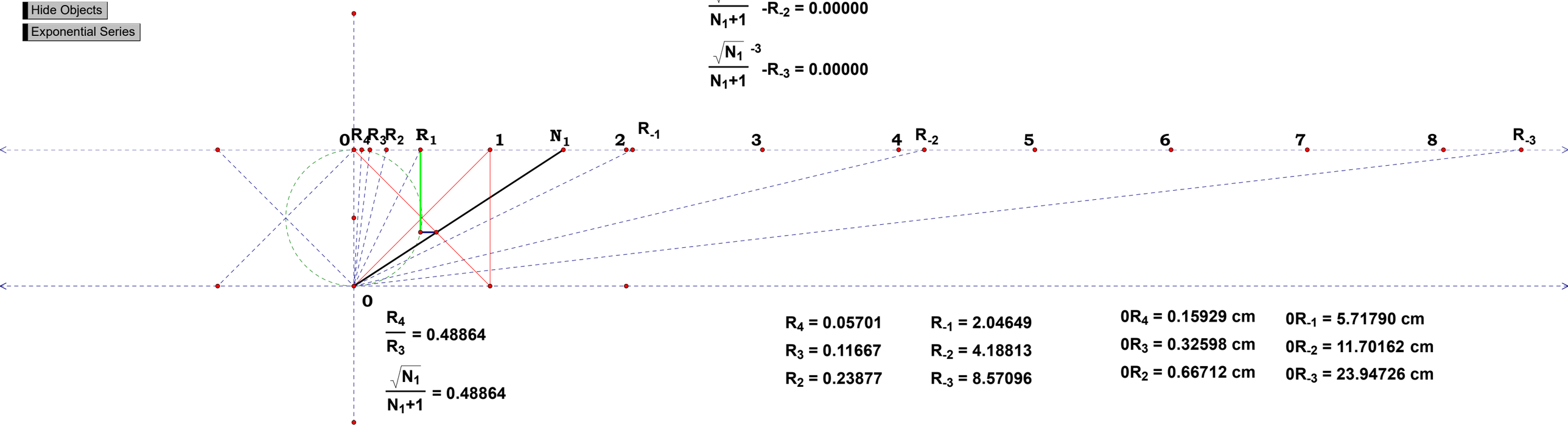
$\frac{\sqrt{N_1}^{\,2}}{N_1+1} - R_2 = 0.00000$

$\frac{\sqrt{N_1}^{\,1}}{N_1+1} - R_1 = 0.00000$

$\frac{\sqrt{N_1}^{\,-1}}{N_1+1} - R_{-1} = 0.00000$

$\frac{\sqrt{N_1}^{\,-2}}{N_1+1} - R_{-2} = 0.00000$

$\frac{\sqrt{N_1}^{\,-3}}{N_1+1} - R_{-3} = 0.00000$



$\frac{R_4}{R_3} = 0.48864$

$\frac{\sqrt{N_1}}{N_1+1} = 0.48864$

R_4 = 0.05701

R_3 = 0.11667

R_2 = 0.23877

R_{-1} = 2.04649

R_{-2} = 4.18813

R_{-3} = 8.57096

$0R_4$ = 0.15929 cm

$0R_3$ = 0.32598 cm

$0R_2$ = 0.66712 cm

$0R_{-1}$ = 5.71790 cm

$0R_{-2}$ = 11.70162 cm

$0R_{-3}$ = 23.94726 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.79400 cm

n_1 = 0.61383 cm

Hide Intersections

Show Lines

Hide Segments

Hide Objects

Exponential Series

$0R_1$ = 2.29073 cm

R_1 = 0.81988

N_1 = 0.21970

$\frac{1}{N_1+1}$ -R_1 = 0.00000

$\frac{1}{N_1+1}^{4}$ -R_4 = 0.00000

$\frac{1}{N_1+1}^{3}$ -R_3 = 0.00000

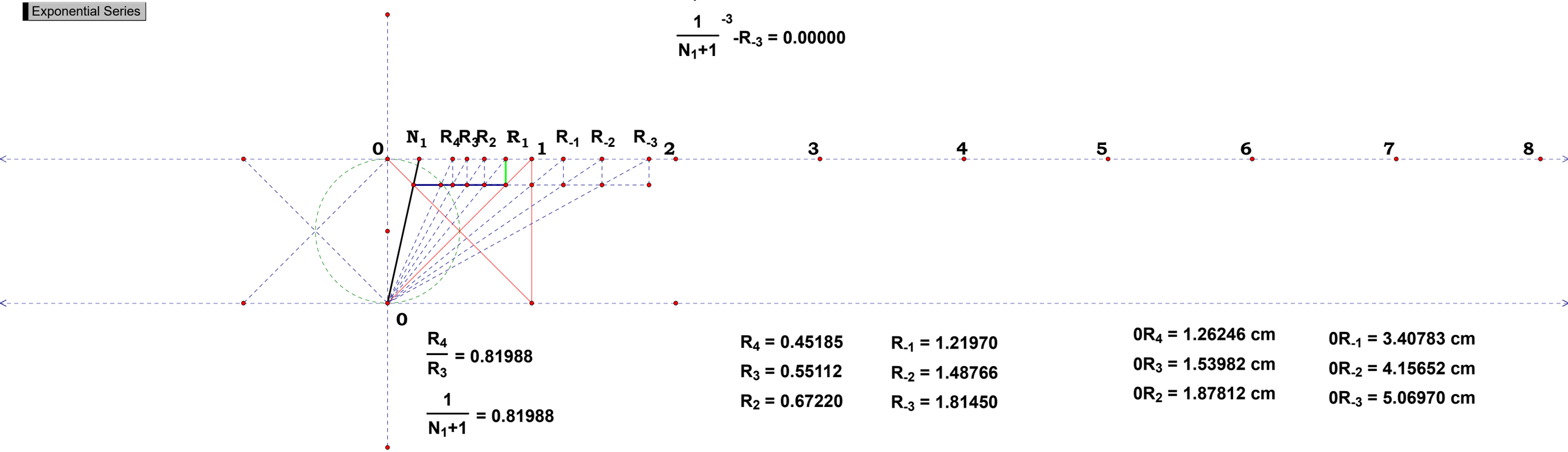
$\frac{1}{N_1+1}^{2}$ -R_2 = 0.00000

$\frac{1}{N_1+1}^{1}$ -R_1 = 0.00000

$\frac{1}{N_1+1}^{-1}$ -R_{-1} = 0.00000

$\frac{1}{N_1+1}^{-2}$ -R_{-2} = 0.00000

$\frac{1}{N_1+1}^{-3}$ -R_{-3} = 0.00000



$\frac{R_4}{R_3}$ = 0.81988

$\frac{1}{N_1+1}$ = 0.81988

R_4 = 0.45185

R_3 = 0.55112

R_2 = 0.67220

R_{-1} = 1.21970

R_{-2} = 1.48766

R_{-3} = 1.81450

$0R_4$ = 1.26246 cm

$0R_3$ = 1.53982 cm

$0R_2$ = 1.87812 cm

$0R_{-1}$ = 3.40783 cm

$0R_{-2}$ = 4.15652 cm

$0R_{-3}$ = 5.06970 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.77283 cm

n_1 = 2.06057 cm

Hide Intersections

Hide Objects

Show Lines

Exponential Series

$0R_1$ = 3.73131 cm

R_1 = 1.34567

N_1 = 0.74313

$\frac{1}{N_1}$ -R_1 = 0.00000

$\frac{1}{N_1}^{-3}$ -R_{-3} = 0.00000

$\frac{1}{N_1}^{-2}$ -R_{-2} = 0.00000

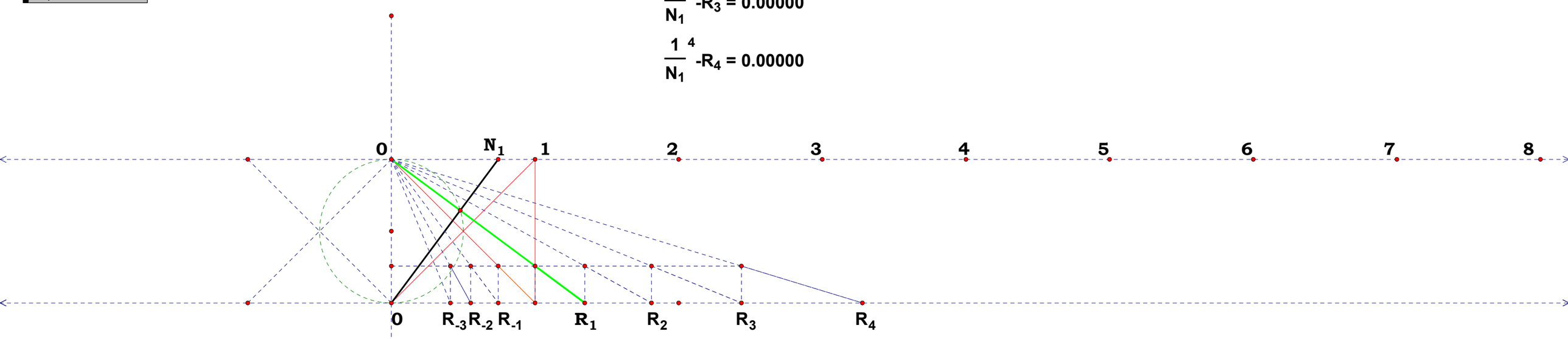
$\frac{1}{N_1}^{-1}$ -R_{-1} = 0.00000

$\frac{1}{N_1}^{1}$ -R_1 = 0.00000

$\frac{1}{N_1}^{2}$ -R_2 = 0.00000

$\frac{1}{N_1}^{3}$ -R_3 = 0.00000

$\frac{1}{N_1}^{4}$ -R_4 = 0.00000



$\frac{R_{-2}}{R_{-3}}$ = 1.34567

$\frac{1}{N_1}$ = 1.34567

R_{-3} = 0.41038

R_{-2} = 0.55224

R_{-1} = 0.74313

R_2 = 1.81082

R_3 = 2.43675

R_4 = 3.27905

$0R_{-3}$ = 1.13792 cm

$0R_{-2}$ = 1.53126 cm

$0R_{-1}$ = 2.06057 cm

$0R_2$ = 5.02109 cm

$0R_3$ = 6.75671 cm

$0R_4$ = 9.09227 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.77283 cm

n_1 = 3.41954 cm

Hide Intersections

Show Lines

Hide Objects

Show Lines

Exponential Series

$0R_1$ = 4.21707 cm

R_1 = 1.52085

N_1 = 1.23323

N_1^2-R_1 = 0.00000

N_1^{2-3}-R_{-3} = 0.00000

N_1^{2-2}-R_{-2} = 0.00000

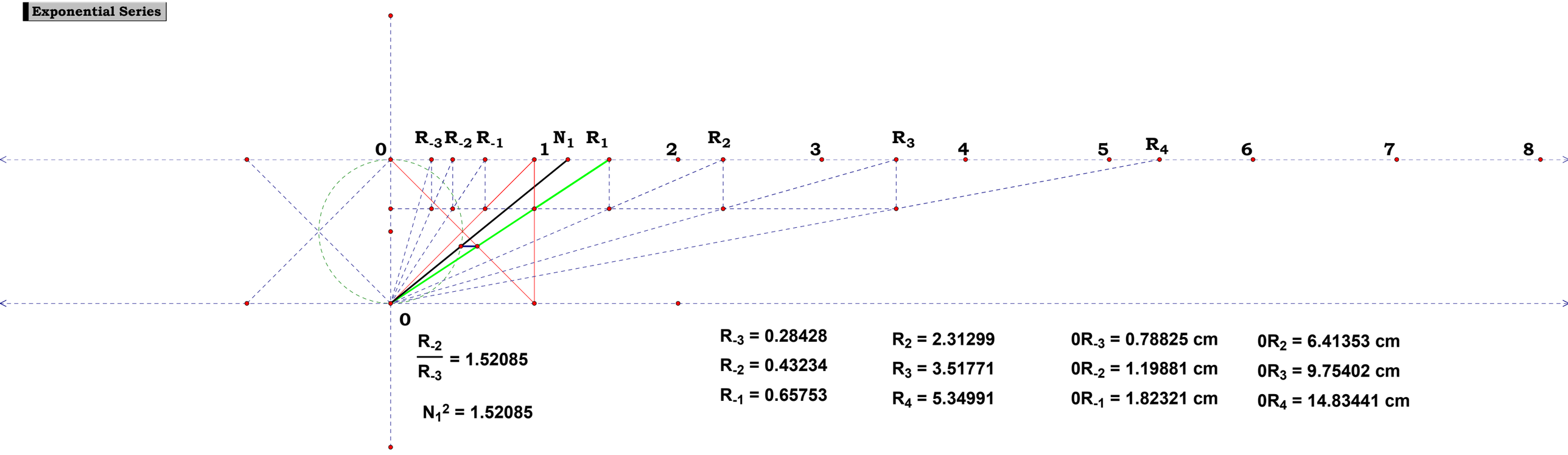
N_1^{2-1}-R_{-1} = 0.00000

N_1^{21}-R_1 = 0.00000

N_1^{22}-R_2 = 0.00000

N_1^{23}-R_3 = 0.00000

N_1^{24}-R_4 = 0.00000



$\frac{R_{-2}}{R_{-3}}$ = 1.52085

N_1^2 = 1.52085

R_{-3} = 0.28428

R_{-2} = 0.43234

R_{-1} = 0.65753

R_2 = 2.31299

R_3 = 3.51771

R_4 = 5.34991

$0R_{-3}$ = 0.78825 cm

$0R_{-2}$ = 1.19881 cm

$0R_{-1}$ = 1.82321 cm

$0R_2$ = 6.41353 cm

$0R_3$ = 9.75402 cm

$0R_4$ = 14.83441 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.77283 cm

n_1 = 4.50850 cm

Hide Intersections

Show Lines

Hide Segments

Base Figure

Exponential Series

$0R_1$ = 2.01185 cm

R_1 = 0.72556

N_1 = 1.62595

$$\frac{N_1^2}{N_1^2+1} - R_1 = 0.00000$$

$$\frac{N_1^2}{N_1^2+1}^{4} - R_4 = 0.00000$$

$$\frac{N_1^2}{N_1^2+1}^{3} - R_3 = 0.00000$$

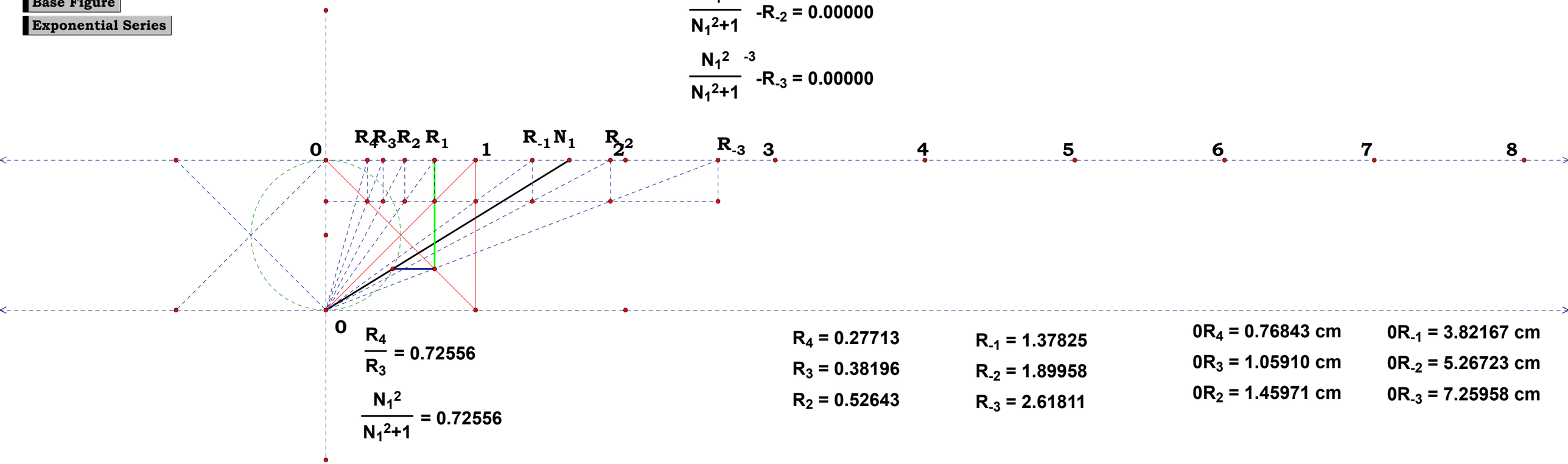
$$\frac{N_1^2}{N_1^2+1}^{2} - R_2 = 0.00000$$

$$\frac{N_1^2}{N_1^2+1}^{1} - R_1 = 0.00000$$

$$\frac{N_1^2}{N_1^2+1}^{-1} - R_{-1} = 0.00000$$

$$\frac{N_1^2}{N_1^2+1}^{-2} - R_{-2} = 0.00000$$

$$\frac{N_1^2}{N_1^2+1}^{-3} - R_{-3} = 0.00000$$



$$\frac{R_4}{R_3} = 0.72556$$

$$\frac{N_1^2}{N_1^2+1} = 0.72556$$

R_4 = 0.27713

R_3 = 0.38196

R_2 = 0.52643

R_{-1} = 1.37825

R_{-2} = 1.89958

R_{-3} = 2.61811

$0R_4$ = 0.76843 cm

$0R_3$ = 1.05910 cm

$0R_2$ = 1.45971 cm

$0R_{-1}$ = 3.82167 cm

$0R_{-2}$ = 5.26723 cm

$0R_{-3}$ = 7.25958 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.77283 cm

n_1 = 2.15900 cm

Hide Intersections

Show Lines

Hide Segments

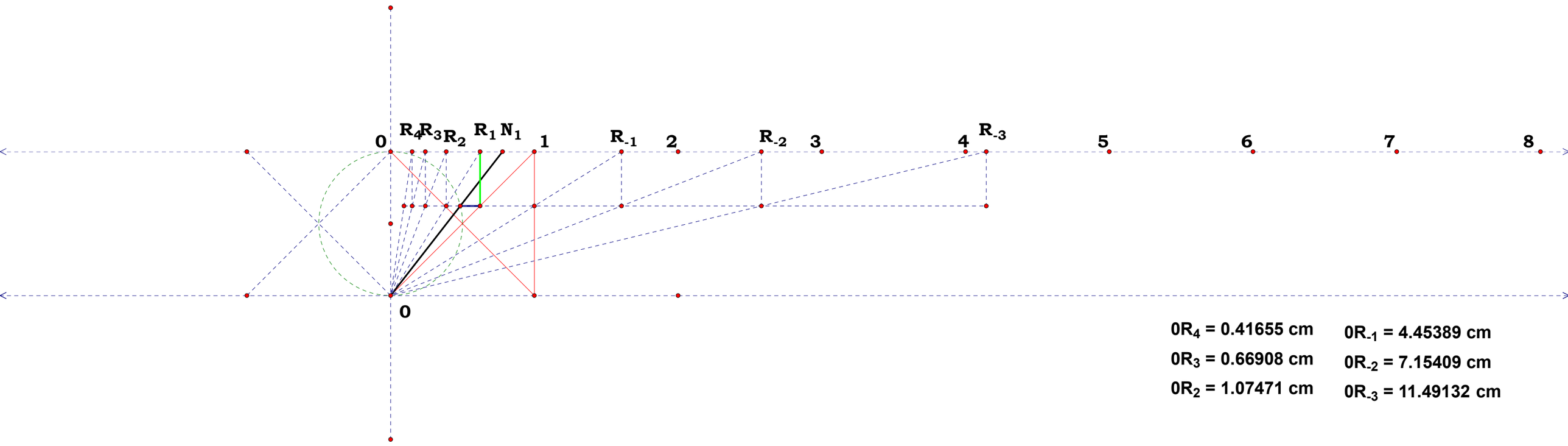
Base Figure

$0R_1$ = 1.72627 cm

R_1 = 0.62256

N_1 = 0.77863

$\frac{1}{N_1^2+1} - R_1$ = 0.00000



$0R_4$ = 0.41655 cm

$0R_3$ = 0.66908 cm

$0R_2$ = 1.07471 cm

$0R_{-1}$ = 4.45389 cm

$0R_{-2}$ = 7.15409 cm

$0R_{-3}$ = 11.49132 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.79400 cm

n_1 = 2.19307 cm

Hide Intersections

Show Lines

Hide Objects

Exponential Series

$0R_1$ = 4.51539 cm

R_1 = 1.61610

N_1 = 0.78492

$(N_1^2+1)-R_1$ = 0.00000

$(N_1^2+1)^{-3}-R_{-3}$ = 0.00000

$(N_1^2+1)^{-2}-R_{-2}$ = 0.00000

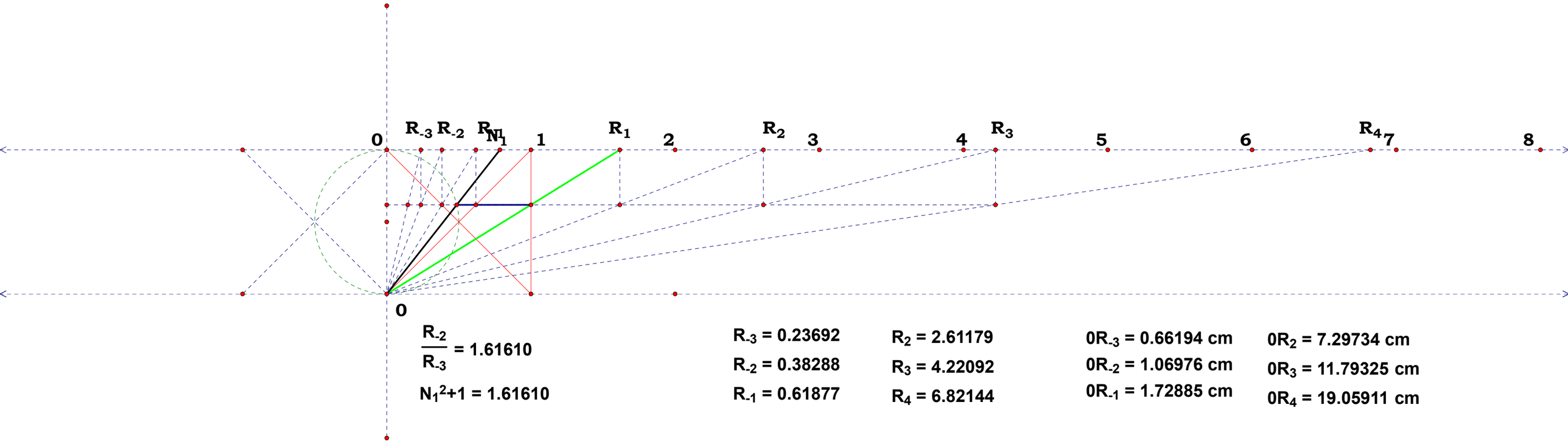
$(N_1^2+1)^{-1}-R_{-1}$ = 0.00000

$(N_1^2+1)^{1}-R_1$ = 0.00000

$(N_1^2+1)^{2}-R_2$ = 0.00000

$(N_1^2+1)^{3}-R_3$ = 0.00000

$(N_1^2+1)^{4}-R_4$ = 0.00000



$\frac{R_{-2}}{R_{-3}}$ = 1.61610

N_1^2+1 = 1.61610

R_{-3} = 0.23692

R_{-2} = 0.38288

R_{-1} = 0.61877

R_2 = 2.61179

R_3 = 4.22092

R_4 = 6.82144

$0R_{-3}$ = 0.66194 cm

$0R_{-2}$ = 1.06976 cm

$0R_{-1}$ = 1.72885 cm

$0R_2$ = 7.29734 cm

$0R_3$ = 11.79325 cm

$0R_4$ = 19.05911 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.79400 cm

n_1 = 4.52967 cm

Hide Intersections

Show Lines

Hide Segments

Exponential Series

Base Figure

$0R_1$ = 3.85703 cm

R_1 = 1.38047

N_1 = 1.62121

$\frac{N_1^2+1}{N_1^2} - R_1 = 0.00000$

$\frac{N_1^2+1}{N_1^2}^{-3} - R_{-3} = 0.00000$

$\frac{N_1^2+1}{N_1^2}^{-2} - R_{-2} = 0.00000$

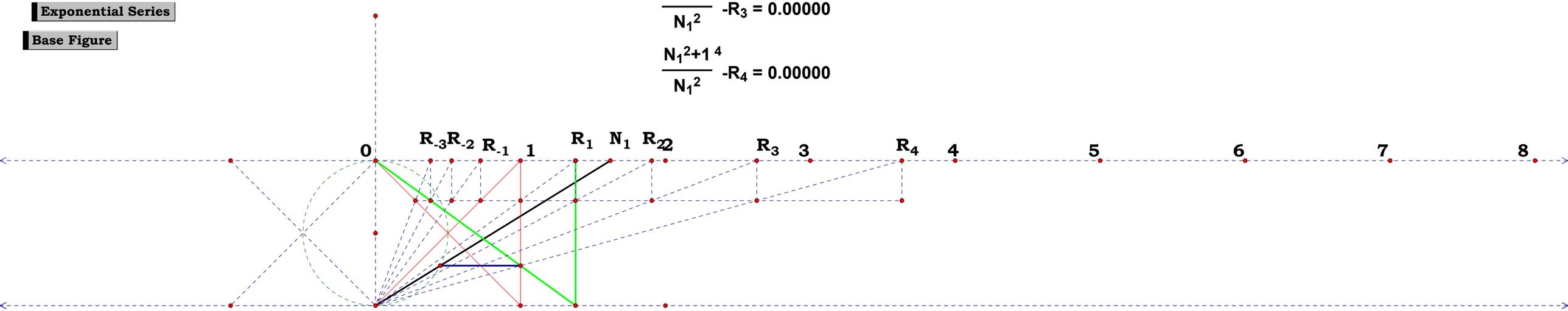
$\frac{N_1^2+1}{N_1^2}^{-1} - R_{-1} = 0.00000$

$\frac{N_1^2+1}{N_1^2}^{1} - R_1 = 0.00000$

$\frac{N_1^2+1}{N_1^2}^{2} - R_2 = 0.00000$

$\frac{N_1^2+1}{N_1^2}^{3} - R_3 = 0.00000$

$\frac{N_1^2+1}{N_1^2}^{4} - R_4 = 0.00000$



$\frac{R_{-2}}{R_{-3}} = 1.38047$

$\frac{N_1^2+1}{N_1^2} = 1.38047$

R_{-3} = 0.38012

R_{-2} = 0.52474

R_{-1} = 0.72439

R_2 = 1.90570

R_3 = 2.63076

R_4 = 3.63168

$0R_{-3}$ = 1.06205 cm

$0R_{-2}$ = 1.46613 cm

$0R_{-1}$ = 2.02395 cm

$0R_2$ = 5.32452 cm

$0R_3$ = 7.35034 cm

$0R_4$ = 10.14692 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.77283 cm

n_1 = 2.35105 cm

Hide Intersections

Show Lines

Hide Objects

Exponential Series

$0R_1$ = 3.85699 cm

R_1 = 1.39099

N_1 = 0.84789

$\frac{1}{N_1^2}$-R_1 = 0.00000

$\frac{1}{N_1^2}^{-3}$ -R_{-3} = 0.00000

$\frac{1}{N_1^2}^{-2}$ -R_{-2} = 0.00000

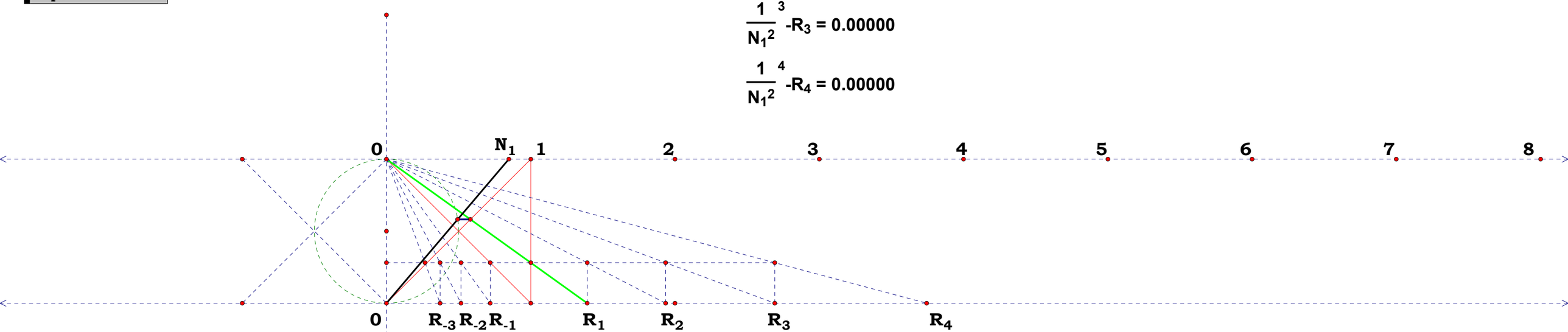
$\frac{1}{N_1^2}^{-1}$ -R_{-1} = 0.00000

$\frac{1}{N_1^2}^{1}$ -R_1 = 0.00000

$\frac{1}{N_1^2}^{2}$ -R_2 = 0.00000

$\frac{1}{N_1^2}^{3}$ -R_3 = 0.00000

$\frac{1}{N_1^2}^{4}$ -R_4 = 0.00000



$\frac{R_{-2}}{R_{-3}}$ = 1.39099

$\frac{1}{N_1^2}$ = 1.39099

R_{-3} = 0.37156

R_{-2} = 0.51683

R_{-1} = 0.71891

R_2 = 1.93486

R_3 = 2.69137

R_4 = 3.74367

$0R_{-3}$ = 1.03027 cm

$0R_{-2}$ = 1.43310 cm

$0R_{-1}$ = 1.99342 cm

$0R_2$ = 5.36503 cm

$0R_3$ = 7.46271 cm

$0R_4$ = 10.38056 cm

Doc N[1]
Move N[1] -> 1
Move N[1] -> 2
Move N[1] -> 3
Move N[1] -> 4
Move N[1] -> 5
Move N[1] -> 6
Move N[1] -> 7
Move N[1] -> 8

Unit = 2.77283 cm

n_1 = 3.26122 cm

Show Lines
Hide Segments
Base Figure
Exponential Series

$0R_1$ = 1.36837 cm

R_1 = 0.49349

N_1 = 1.17613

$$\frac{N_1}{N_1^2+1} - R_1 = 0.00000$$

$$\frac{N_1}{N_1^2+1}^4 - R_4 = 0.00000$$

$$\frac{N_1}{N_1^2+1}^3 - R_3 = 0.00000$$

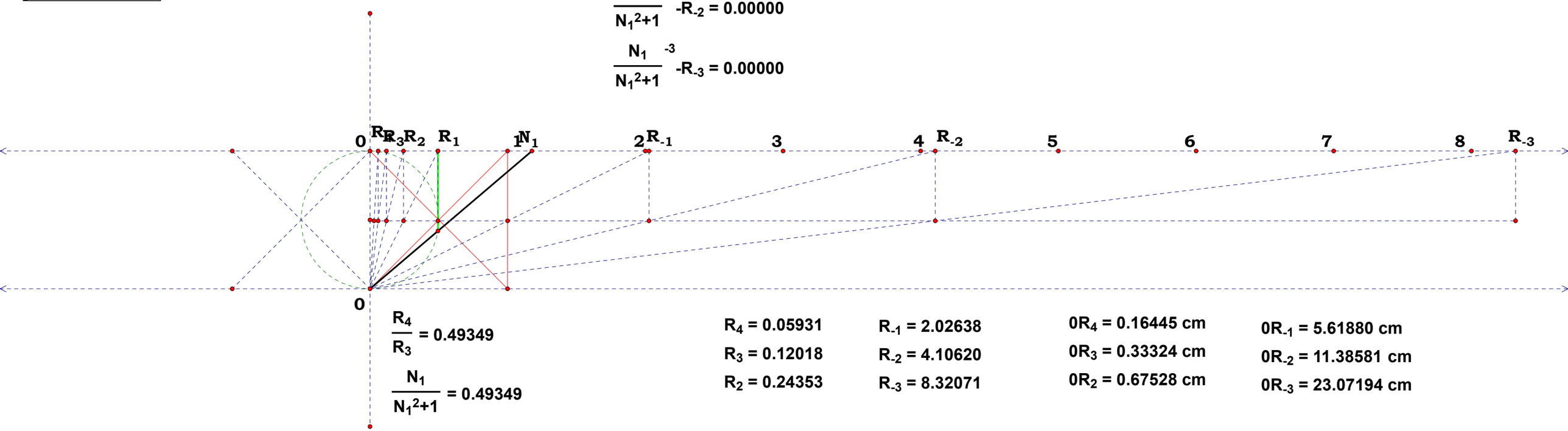
$$\frac{N_1}{N_1^2+1}^2 - R_2 = 0.00000$$

$$\frac{N_1}{N_1^2+1}^1 - R_1 = 0.00000$$

$$\frac{N_1}{N_1^2+1}^{-1} - R_{-1} = 0.00000$$

$$\frac{N_1}{N_1^2+1}^{-2} - R_{-2} = 0.00000$$

$$\frac{N_1}{N_1^2+1}^{-3} - R_{-3} = 0.00000$$



$$\frac{R_4}{R_3} = 0.49349$$

$$\frac{N_1}{N_1^2+1} = 0.49349$$

R_4 = 0.05931
R_3 = 0.12018
R_2 = 0.24353

R_{-1} = 2.02638
R_{-2} = 4.10620
R_{-3} = 8.32071

$0R_4$ = 0.16445 cm
$0R_3$ = 0.33324 cm
$0R_2$ = 0.67528 cm

$0R_{-1}$ = 5.61880 cm
$0R_{-2}$ = 11.38581 cm
$0R_{-3}$ = 23.07194 cm

Doc N[1]

Move N[1] -> 1

Move N[1] -> 2

Move N[1] -> 3

Move N[1] -> 4

Move N[1] -> 5

Move N[1] -> 6

Move N[1] -> 7

Move N[1] -> 8

Unit = 2.79400 cm

n_1 = 4.21217 cm

Hide Intersections

Hide Objects

Hide Segments

Show Lines

Base Figure

Exponential Series

$0R_1$ = 1.85331 cm

R_1 = 0.66332

N_1 = 1.50758

$\frac{1}{N_1} - R_1 = 0.00000$

$\frac{1}{N_1}^{4} - R_4 = 0.00000$

$\frac{1}{N_1}^{3} - R_3 = 0.00000$

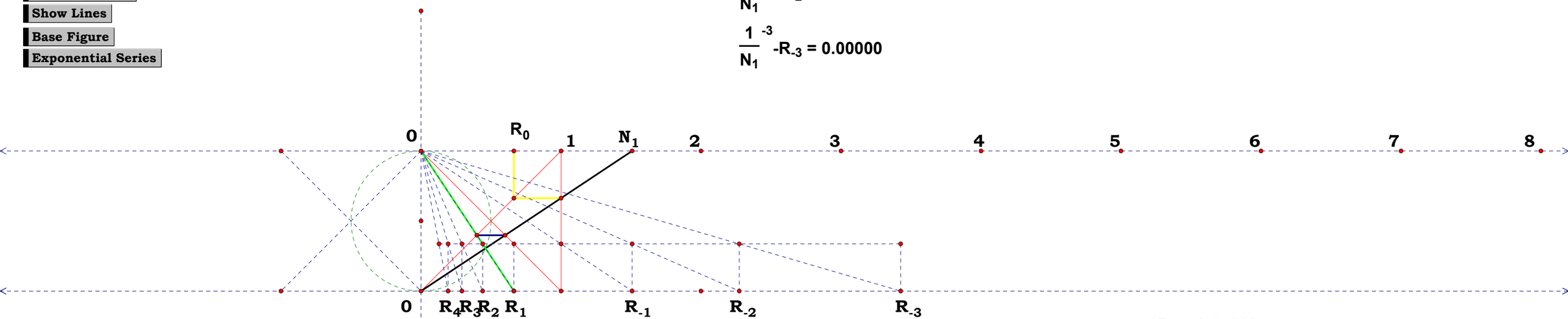
$\frac{1}{N_1}^{2} - R_2 = 0.00000$

$\frac{1}{N_1}^{1} - R_1 = 0.00000$

$\frac{1}{N_1}^{-1} - R_{-1} = 0.00000$

$\frac{1}{N_1}^{-2} - R_{-2} = 0.00000$

$\frac{1}{N_1}^{-3} - R_{-3} = 0.00000$



$\frac{R_4}{R_3} = 0.66332$

$\frac{1}{N_1} = 0.66332$

R_4 = 0.19359

R_3 = 0.29185

R_2 = 0.43999

R_{-1} = 1.50758

R_{-2} = 2.27278

R_{-3} = 3.42640

$0R_4$ = 0.54089 cm

$0R_3$ = 0.81543 cm

$0R_2$ = 1.22933 cm

$0R_{-1}$ = 4.21217 cm

$0R_{-2}$ = 6.35016 cm

$0R_{-3}$ = 9.57335 cm

Circle

Show Lines

0

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

N_1 = 1.66534

A = 1.29048

B = 2.77337

$\sqrt{N_1}$ = 1.29048

N_1^2 = 2.77337

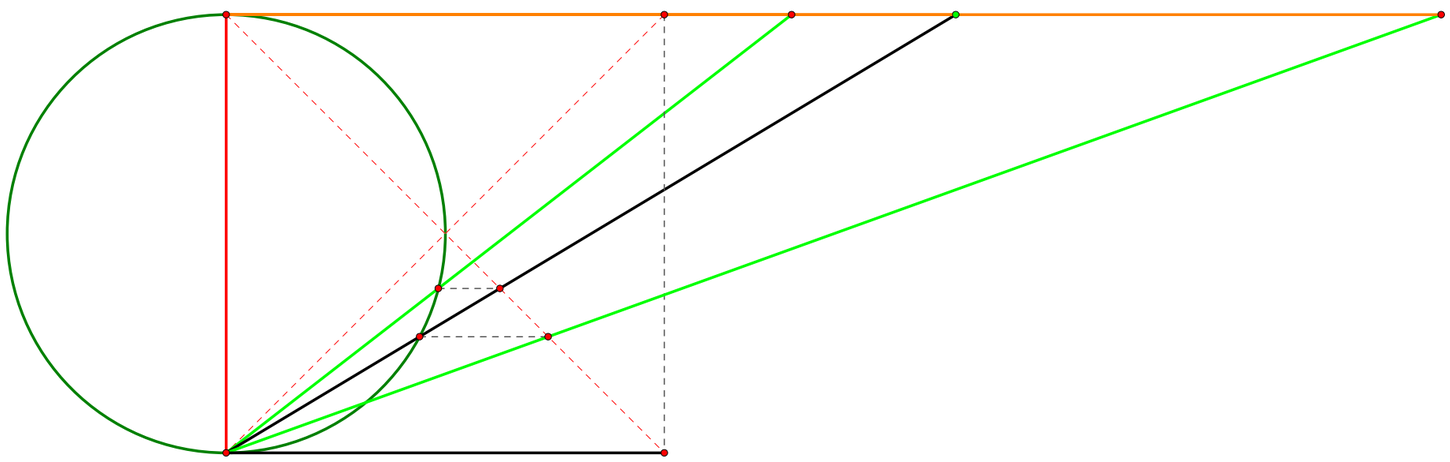
$\sqrt{N_1}$-A = 0.00000

N_1^2-B = 0.00000

A

n_1

B



Points

A^2-B = 0.00000
(A·B)-C = 0.00000
B^2-D = 0.00000
(B·C)-E = 0.00000

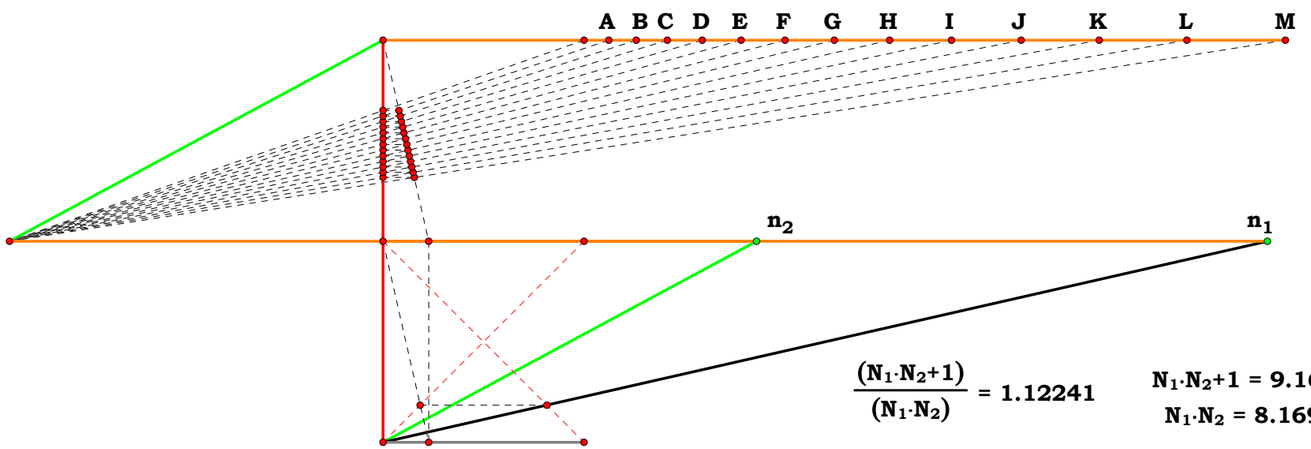
C^2-F = 0.00000
(C·D)-G = 0.00000
D^2-H = 0.00000
(D·E)-I = 0.00000

E^2-J = 0.00000
(E·F)-K = 0.00000
F^2-L = 0.00000
(F·G)-M = 0.00000

$\frac{N_1 \cdot N_2 + 1}{N_1 \cdot N_2}^{1}$ -A = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{2}$ -B = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{3}$ -C = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{4}$ -D = 0.00000

$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{5}$ -E = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{6}$ -F = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{7}$ -G = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{8}$ -H = 0.00000

$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{9}$ -I = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{10}$ -J = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{11}$ -K = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{12}$ -L = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{13}$ -M = 0.00000



$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}$ = 1.12241

$N_1 \cdot N_2 + 1$ = 9.16907
$N_1 \cdot N_2$ = 8.16907

A^3-C = 0.00000
B^3-F = 0.00000
C^3-I = 0.00000
D^3-L = 0.00000

N_1 = 4.39883
N_2 = 1.85710

A = 1.12241
B = 1.25981
C = 1.41403
D = 1.58712
E = 1.78141

F = 1.99947
G = 2.24424
H = 2.51896
I = 2.82731

J = 3.17341
K = 3.56188
L = 3.99790
M = 4.48729

A^2 = 1.25981
A·B = 1.41403
B^2 = 1.58712
B·C = 1.78141

C^2 = 1.99947
C·D = 2.24424
D^2 = 2.51896
D·E = 2.82731

E^2 = 3.17341
E·F = 3.56188
F^2 = 3.99790
F·G = 4.48729

Circle
Show Lines
0
1
2
3
4
5
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11
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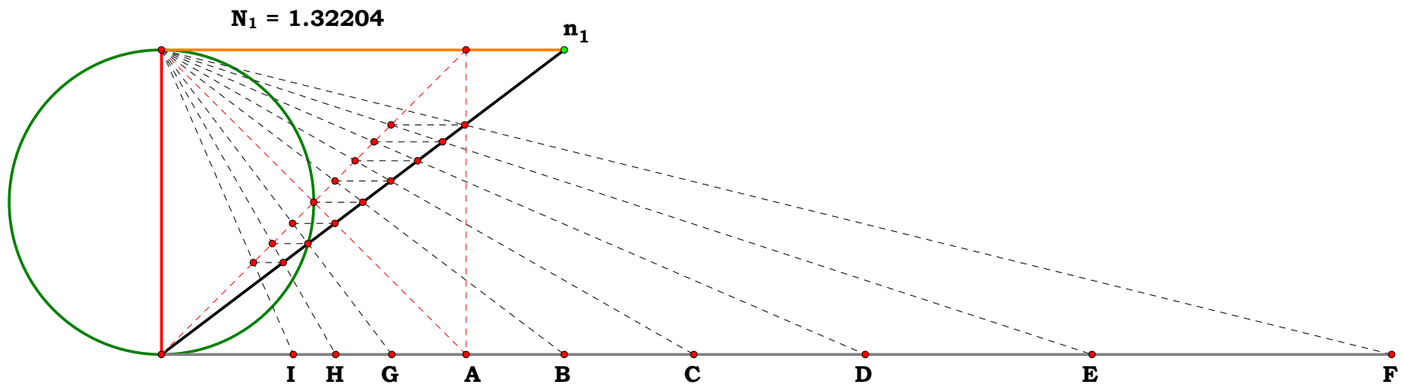
13
14
15

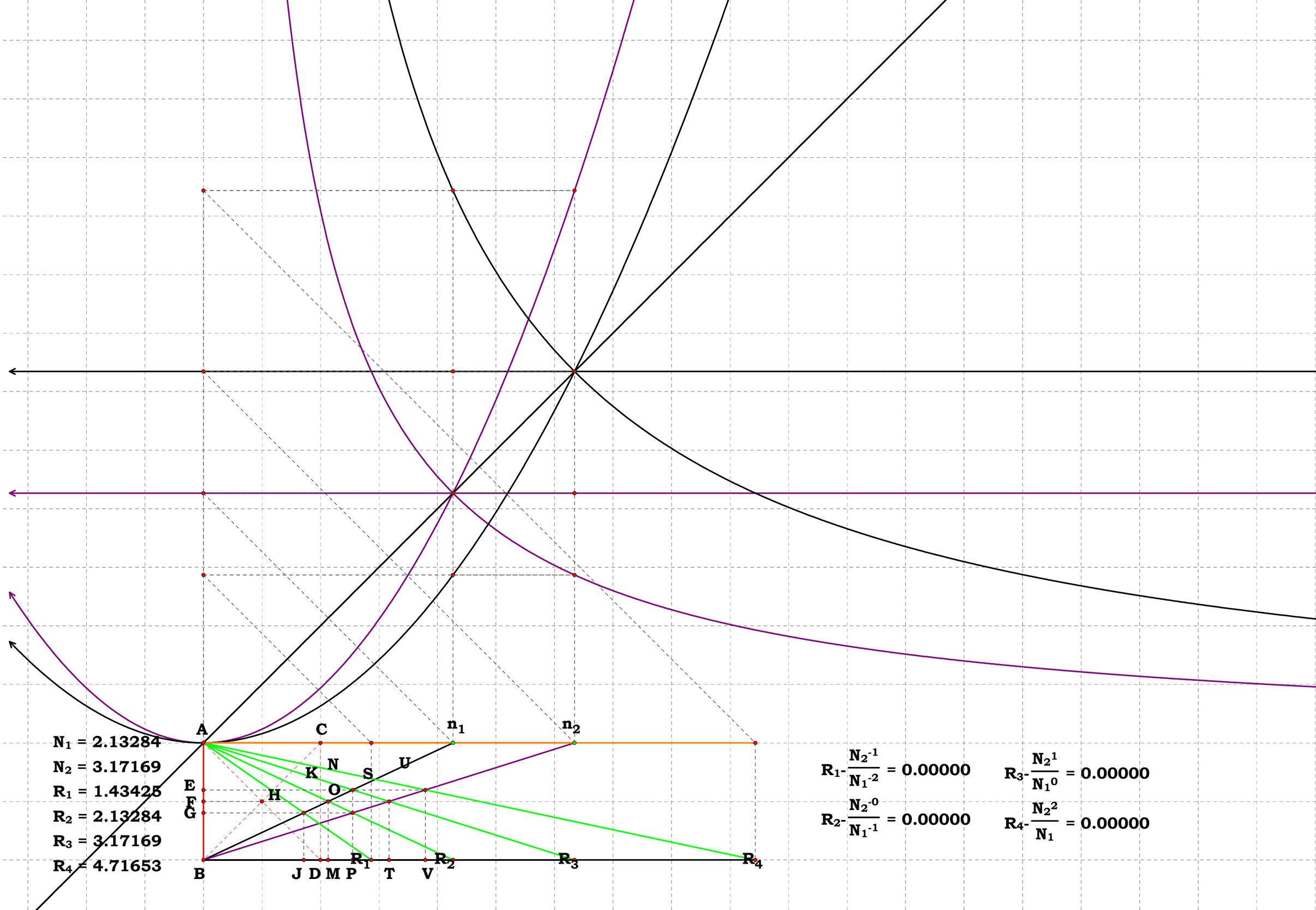
Points

Hide Action Buttons

A = 1.00000
B = 1.32204
C = 1.74778
D = 2.31062
E = 3.05473
F = 4.03846
G = 0.75641
H = 0.57216
I = 0.43278

N_1^0-A = 0.00000
N_1^1-B = 0.00000
N_1^2-C = 0.00000
N_1^3-D = 0.00000
N_1^4-E = 0.00000
N_1^5-F = 0.00000
N_1^{-1}-G = 0.00000
N_1^{-2}-H = 0.00000
N_1^{-3}-I = 0.00000





$N_1 = 2.13284$

$N_2 = 3.17169$

$R_1 = 1.43425$

$R_2 = 2.13284$

$R_3 = 3.17169$

$R_4 = 4.71653$

$R_1\text{-}\dfrac{N_2^{-1}}{N_1^{-2}} = 0.00000$ $\qquad R_3\text{-}\dfrac{N_2^{1}}{N_1^{0}} = 0.00000$

$R_2\text{-}\dfrac{N_2^{-0}}{N_1^{-1}} = 0.00000$ $\qquad R_4\text{-}\dfrac{N_2^{2}}{N_1} = 0.00000$

Circle

Show Lines

0

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

0

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Points

$N_1 = 3.46347$

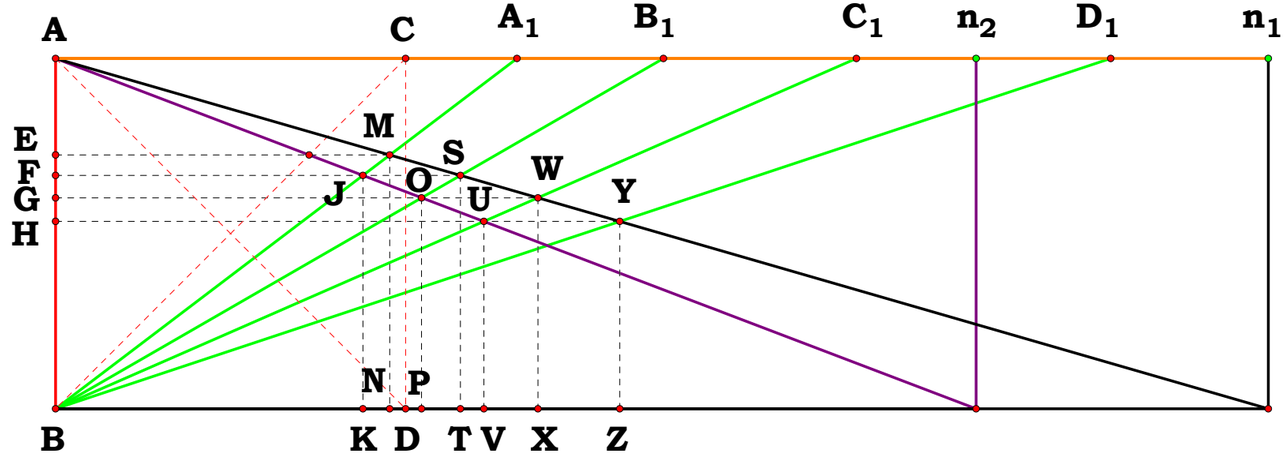
$N_2 = 2.62874$

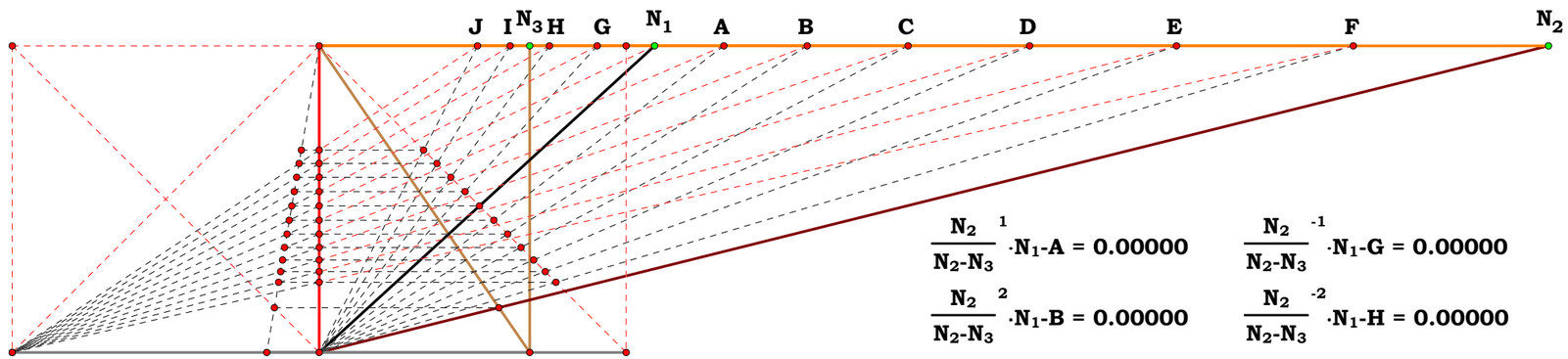
$A_1 = 1.31754$

$B_1 = 1.73591$

$C_1 = 2.28713$

$D_1 = 3.01339$





$$\frac{N_2}{N_2-N_3}^{1}\cdot N_1\text{-}A = 0.00000 \qquad \frac{N_2}{N_2-N_3}^{-1}\cdot N_1\text{-}G = 0.00000$$

$$\frac{N_2}{N_2-N_3}^{2}\cdot N_1\text{-}B = 0.00000 \qquad \frac{N_2}{N_2-N_3}^{-2}\cdot N_1\text{-}H = 0.00000$$

$$\frac{N_2}{N_2-N_3}^{3}\cdot N_1\text{-}C = 0.00000 \qquad \frac{N_2}{N_2-N_3}^{-3}\cdot N_1\text{-}I = 0.00000$$

$$\frac{N_2}{N_2-N_3}^{4}\cdot N_1\text{-}D = 0.00000 \qquad \frac{N_2}{N_2-N_3}^{-4}\cdot N_1\text{-}J = 0.00000$$

$$\frac{N_2}{N_2-N_3}^{5}\cdot N_1\text{-}E = 0.00000$$

$$\frac{N_2}{N_2-N_3}^{6}\cdot N_1\text{-}F = 0.00000$$

$$\frac{N_1^{\frac{1}{4}}\cdot N_2^{4}}{N_2-N_3}\text{-}D = 0.00000$$

$$\frac{N_1\cdot N_2^{4}}{(N_2-N_3)^{4}}\text{-}D = 0.00000$$

$$\frac{N_2}{N_2-N_3} = 1.20647$$

$N_1 = 1.09230$

$N_2 = 4.00439$

$N_3 = 0.68530$

$A = 1.31783$

$B = 1.58992$

$C = 1.91819$

$D = 2.31425$

$E = 2.79207$

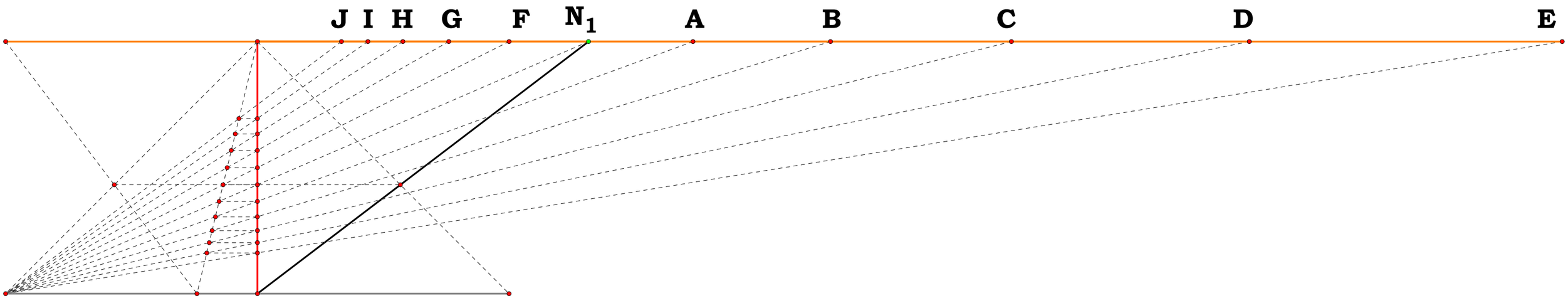
$F = 3.36855$

$G = 0.90537$

$H = 0.75043$

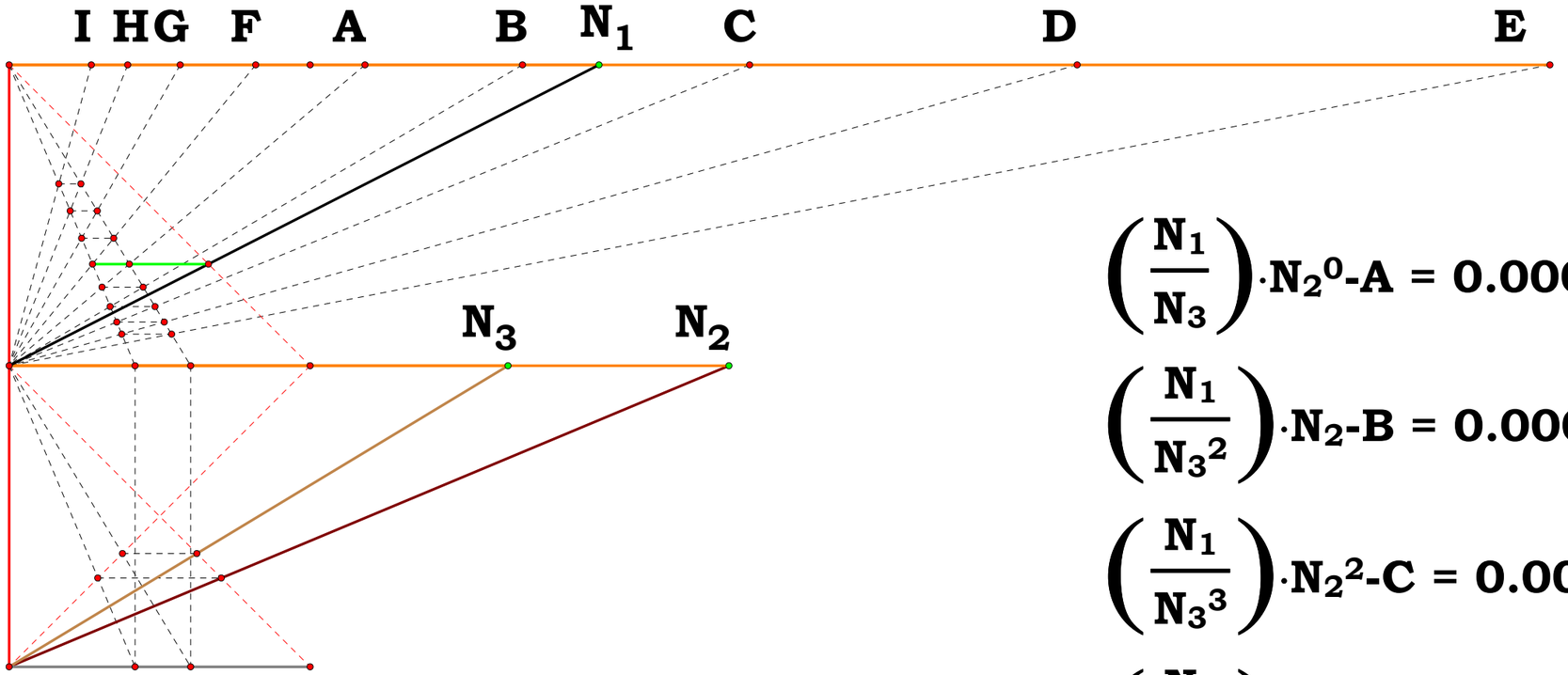
$I = 0.62200$

$J = 0.51556$



N_1 = 1.31554

A = 1.73065	F = 1.00000	N_1^2-A = 0.00000	N_1^0-F = 0.00000
B = 2.27675	G = 0.76014	N_1^3-B = 0.00000	N_1^{-1}-G = 0.00000
C = 2.99516	H = 0.57782	N_1^4-C = 0.00000	N_1^{-2}-H = 0.00000
D = 3.94026	I = 0.43922	N_1^5-D = 0.00000	N_1^{-3}-I = 0.00000
E = 5.18358	J = 0.33387	N_1^6-E = 0.00000	N_1^{-4}-J = 0.00000



$N_1 = 1.95987$

$N_2 = 2.39124$

$N_3 = 1.65771$

$A = 1.18227$

$B = 1.70541$

$C = 2.46005$

$D = 3.54859$

$E = 5.11881$

$F = 0.81960$

$G = 0.56819$

$H = 0.39389$

$I = 0.27306$

$$\left(\frac{N_1}{N_3}\right)\cdot N_2^{0}\text{-}A = 0.00000$$

$$\left(\frac{N_1}{N_3^{2}}\right)\cdot N_2\text{-}B = 0.00000$$

$$\left(\frac{N_1}{N_3^{3}}\right)\cdot N_2^{2}\text{-}C = 0.00000$$

$$\left(\frac{N_1}{N_3^{4}}\right)\cdot N_2^{3}\text{-}D = 0.00000$$

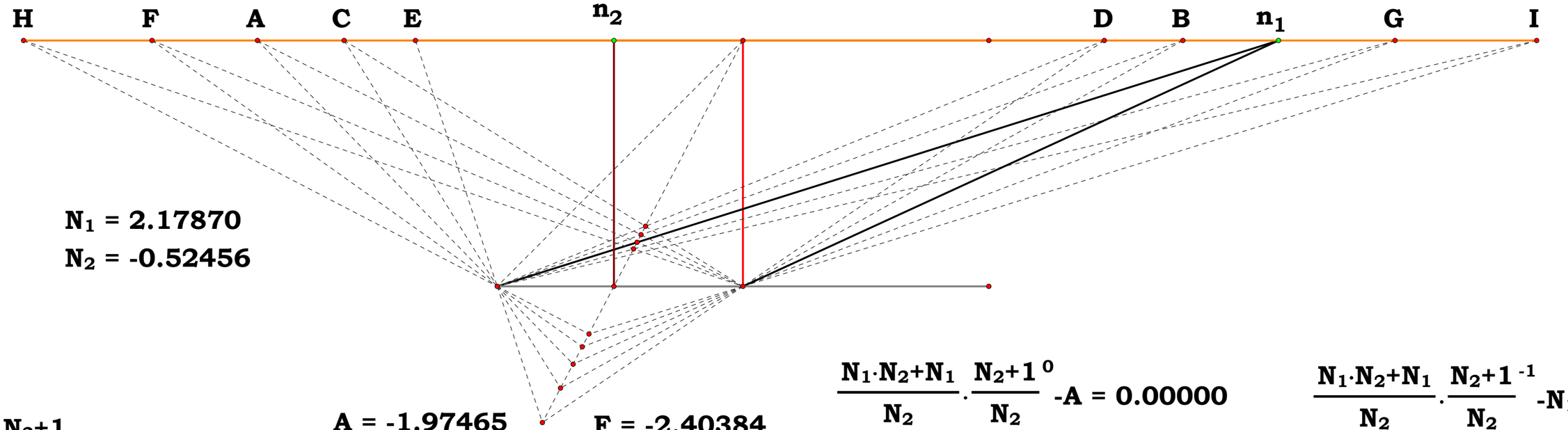
$$\left(\frac{N_1}{N_3^{5}}\right)\cdot N_2^{4}\text{-}E = 0.00000$$

$$\left(\frac{N_1}{N_3^{0}}\right)\cdot N_2^{-1}\text{-}F = 0.00000$$

$$\left(\frac{N_1}{N_3^{-1}}\right)\cdot N_2^{-2}\text{-}G = 0.00000$$

$$\left(\frac{N_1}{N_3^{-2}}\right)\cdot N_2^{-3}\text{-}H = 0.00000$$

$$\left(\frac{N_1}{N_3^{-3}}\right)\cdot N_2^{-4}\text{-}I = 0.00000$$



$N_1 = 2.17870$

$N_2 = -0.52456$

$\frac{N_2+1}{N_2} = -0.90634$

$\frac{N_1 \cdot N_2+N_1}{N_2} = -1.97465$

$A = -1.97465$

$B = 1.78970$

$C = -1.62208$

$D = 1.47016$

$E = -1.33247$

$F = -2.40384$

$G = 2.65225$

$H = -2.92632$

$I = 3.22872$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{0} - A = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{1} - B = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{2} - C = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{3} - D = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{4} - E = 0.00000$

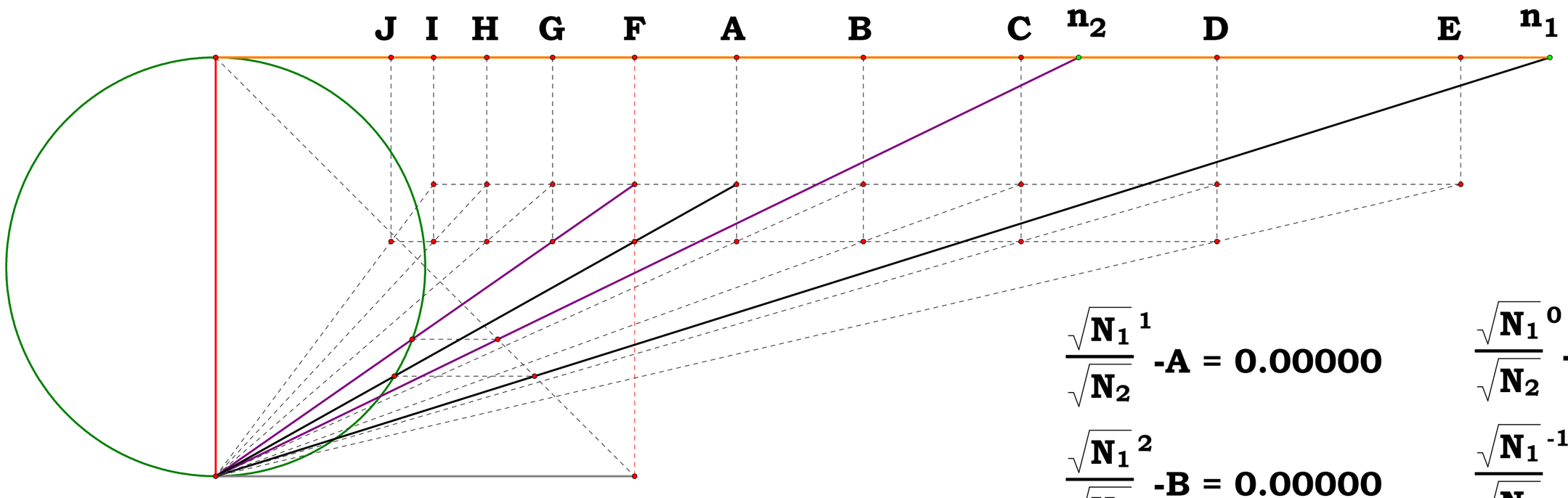
$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-1} - N_1 = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-2} - F = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-3} - G = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-4} - H = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-5} - I = 0.00000$



$$\frac{\sqrt{N_1}}{\sqrt{N_2}} = 1.24338$$

$N_1 = 3.18458$

$N_2 = 2.05988$

A = 1.24338

B = 1.54601

C = 1.92228

D = 2.39013

E = 2.97185

F = 1.00000

G = 0.80426

H = 0.64683

I = 0.52022

J = 0.41839

$$\frac{\sqrt{N_1}^{1}}{\sqrt{N_2}} \text{-A} = 0.00000$$

$$\frac{\sqrt{N_1}^{2}}{\sqrt{N_2}} \text{-B} = 0.00000$$

$$\frac{\sqrt{N_1}^{3}}{\sqrt{N_2}} \text{-C} = 0.00000$$

$$\frac{\sqrt{N_1}^{4}}{\sqrt{N_2}} \text{-D} = 0.00000$$

$$\frac{\sqrt{N_1}^{5}}{\sqrt{N_2}} \text{-E} = 0.00000$$

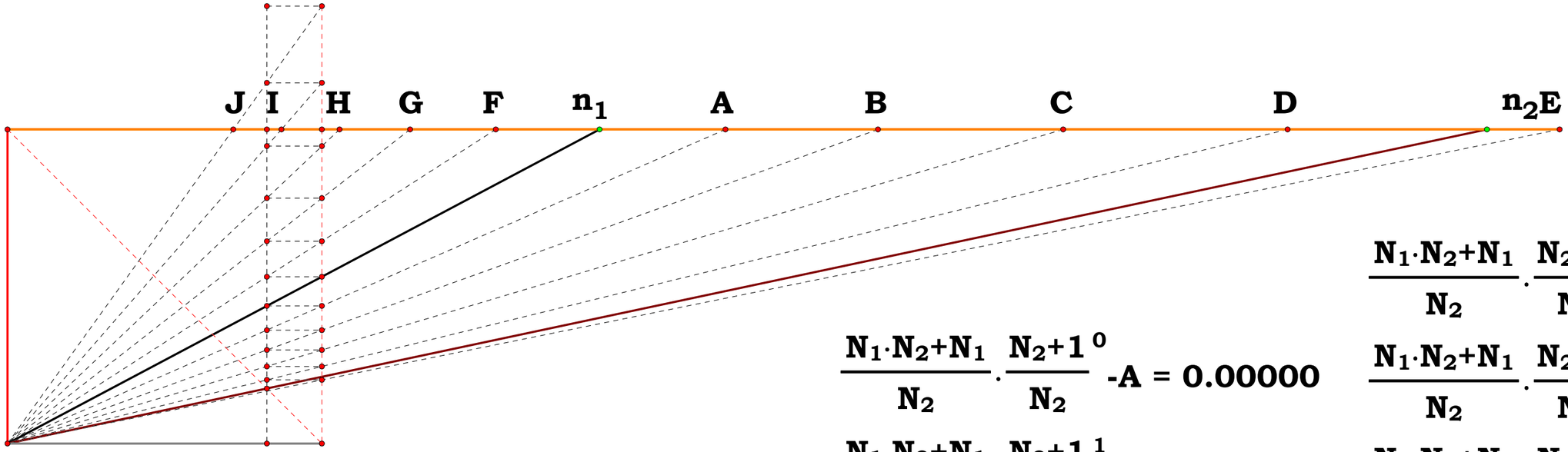
$$\frac{\sqrt{N_1}^{0}}{\sqrt{N_2}} \text{-F} = 0.00000$$

$$\frac{\sqrt{N_1}^{-1}}{\sqrt{N_2}} \text{-G} = 0.00000$$

$$\frac{\sqrt{N_1}^{-2}}{\sqrt{N_2}} \text{-H} = 0.00000$$

$$\frac{\sqrt{N_1}^{-3}}{\sqrt{N_2}} \text{-I} = 0.00000$$

$$\frac{\sqrt{N_1}^{-4}}{\sqrt{N_2}} \text{-J} = 0.00000$$



$$\frac{N_1 \cdot N_2 + N_1}{N_2} = 2.28293$$

$$\frac{N_2 + 1}{N_2} = 1.21256$$

$N_1 = 1.88273$

$N_2 = 4.70446$

$A = 2.28293$
$B = 2.76820$
$C = 3.35663$
$D = 4.07012$
$E = 4.93529$
$F = 1.55269$
$G = 1.28050$
$H = 1.05603$
$I = 0.87090$
$J = 0.71823$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{0} - A = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{1} - B = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{2} - C = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{3} - D = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{4} - E = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{-1} - N_1 = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{-2} - F = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{-3} - G = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{-4} - H = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{-5} - I = 0.00000$$

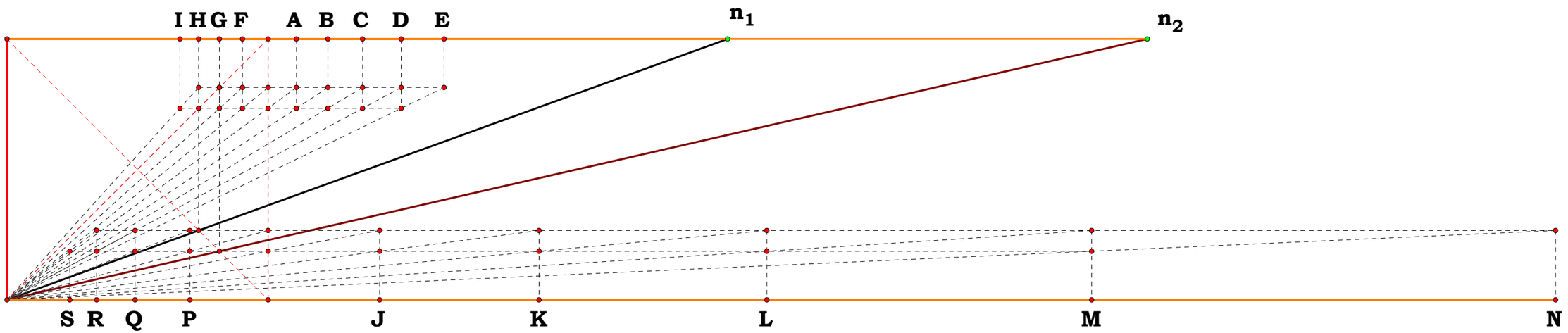
$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{-6} - J = 0.00000$$

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)} = 1.10854$$

A = 1.10854
B = 1.22886
C = 1.36225
D = 1.51010
E = 1.67401
F = 0.90209
G = 0.81376
H = 0.73408
I = 0.66221

$$\frac{N_2\cdot(N_1+1)^{1}}{N_1\cdot(N_2+1)} - A = 0.00000$$
$$\frac{N_2\cdot(N_1+1)^{2}}{N_1\cdot(N_2+1)} - B = 0.00000$$
$$\frac{N_2\cdot(N_1+1)^{3}}{N_1\cdot(N_2+1)} - C = 0.00000$$
$$\frac{N_2\cdot(N_1+1)^{4}}{N_1\cdot(N_2+1)} - D = 0.00000$$
$$\frac{N_2\cdot(N_1+1)^{5}}{N_1\cdot(N_2+1)} - E = 0.00000$$

$$\frac{N_2\cdot(N_1+1)^{-1}}{N_1\cdot(N_2+1)} - F = 0.00000$$
$$\frac{N_2\cdot(N_1+1)^{-2}}{N_1\cdot(N_2+1)} - G = 0.00000$$
$$\frac{N_2\cdot(N_1+1)^{-3}}{N_1\cdot(N_2+1)} - H = 0.00000$$
$$\frac{N_2\cdot(N_1+1)^{-4}}{N_1\cdot(N_2+1)} - I = 0.00000$$



$$\frac{N_2+1}{N_1+1} = 1.42764$$

$N_1 = 2.75971$
$N_2 = 4.36750$

J = 1.42764
K = 2.03815
L = 2.90973
M = 4.15404
N = 5.93046

P = 0.70046
Q = 0.49064
R = 0.34367
S = 0.24073

$$\frac{N_2+1^{1}}{N_1+1} - J = 0.00000$$
$$\frac{N_2+1^{2}}{N_1+1} - K = 0.00000$$
$$\frac{N_2+1^{3}}{N_1+1} - L = 0.00000$$
$$\frac{N_2+1^{4}}{N_1+1} - M = 0.00000$$
$$\frac{N_2+1^{5}}{N_1+1} - N = 0.00000$$

$$\frac{N_2+1^{-1}}{N_1+1} - P = 0.00000$$
$$\frac{N_2+1^{-2}}{N_1+1} - Q = 0.00000$$
$$\frac{N_2+1^{-3}}{N_1+1} - R = 0.00000$$
$$\frac{N_2+1^{-4}}{N_1+1} - S = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2} = 0.83725$$

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot N_2+N_1} = 1.12397$$

A = 0.83725
B = 0.94105
C = 1.05771
D = 1.18884
E = 1.33622

F = 0.74490
G = 0.66274
H = 0.58964
I = 0.52461

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{0}}{N_1\cdot N_2+N_1} - A = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{1}}{N_1\cdot N_2+N_1} - B = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{2}}{N_1\cdot N_2+N_1} - C = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{3}}{N_1\cdot N_2+N_1} - D = 0.00000$$

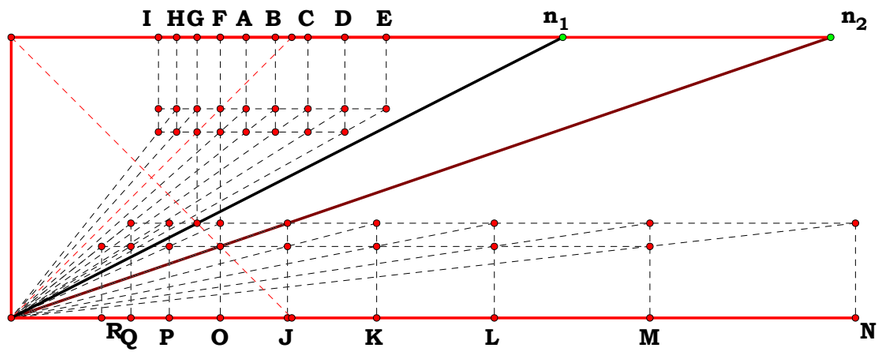
$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{4}}{N_1\cdot N_2+N_1} - E = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-1}}{N_1\cdot N_2+N_1} - F = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-2}}{N_1\cdot N_2+N_1} - G = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-3}}{N_1\cdot N_2+N_1} - H = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-4}}{N_1\cdot N_2+N_1} - I = 0.00000$$



$$\frac{N_2}{N_1+1} = 0.98482$$

$$\frac{N_2+1}{N_1+1} = 1.32208$$

N_1 = 1.96510
N_2 = 2.92011

J = 0.98482
K = 1.30202
L = 1.72138
M = 2.27580
N = 3.00879

O = 0.74490
P = 0.56343
Q = 0.42617
R = 0.32235

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{0}}{N_1+1} - J = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{1}}{N_1+1} - K = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{2}}{N_1+1} - L = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{3}}{N_1+1} - M = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{4}}{N_1+1} - N = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-1}}{N_1+1} - O = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-2}}{N_1+1} - P = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-3}}{N_1+1} - Q = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-4}}{N_1+1} - R = 0.00000$$

$B = 1.31080$
$C = 1.71820$
$D = 2.25222$
$E = 2.95221$
$F = 3.86977$
$G = 5.07250$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)} = 1.31080 \qquad \frac{N_1\cdot(N_2-1)^{1}}{N_2\cdot(N_1-1)} - B = 0.00000$$

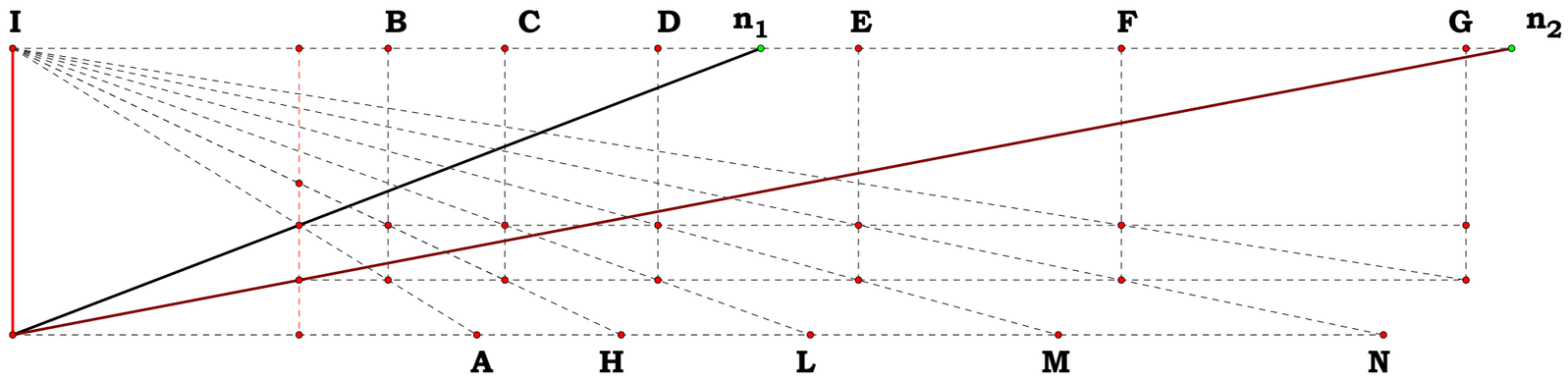
$$\frac{N_1\cdot(N_2-1)^{2}}{N_2\cdot(N_1-1)} = 1.71820 \qquad \frac{N_1\cdot(N_2-1)^{2}}{N_2\cdot(N_1-1)} - C = 0.00000$$

$$\frac{N_1\cdot(N_2-1)^{3}}{N_2\cdot(N_1-1)} = 2.25222 \qquad \frac{N_1\cdot(N_2-1)^{3}}{N_2\cdot(N_1-1)} - D = 0.00000$$

$$\frac{N_1\cdot(N_2-1)^{4}}{N_2\cdot(N_1-1)} = 2.95221 \qquad \frac{N_1\cdot(N_2-1)^{4}}{N_2\cdot(N_1-1)} - E = 0.00000$$

$$\frac{N_1\cdot(N_2-1)^{5}}{N_2\cdot(N_1-1)} = 3.86977 \qquad \frac{N_1\cdot(N_2-1)^{5}}{N_2\cdot(N_1-1)} - F = 0.00000$$

$$\frac{N_1\cdot(N_2-1)^{6}}{N_2\cdot(N_1-1)} = 5.07250 \qquad \frac{N_1\cdot(N_2-1)^{6}}{N_2\cdot(N_1-1)} - G = 0.00000$$



$$\frac{N_1}{N_1-1} - A = 0.00000$$

$$\frac{N_1^{2}\cdot(N_2-1)}{N_2\cdot(N_1-1)^{2}} = 2.12423$$

$N_1 = 2.61146$
$N_2 = 5.23175$

$A = 1.62056$
$H = 2.12423$
$L = 2.78444$
$M = 3.64985$
$N = 4.78423$

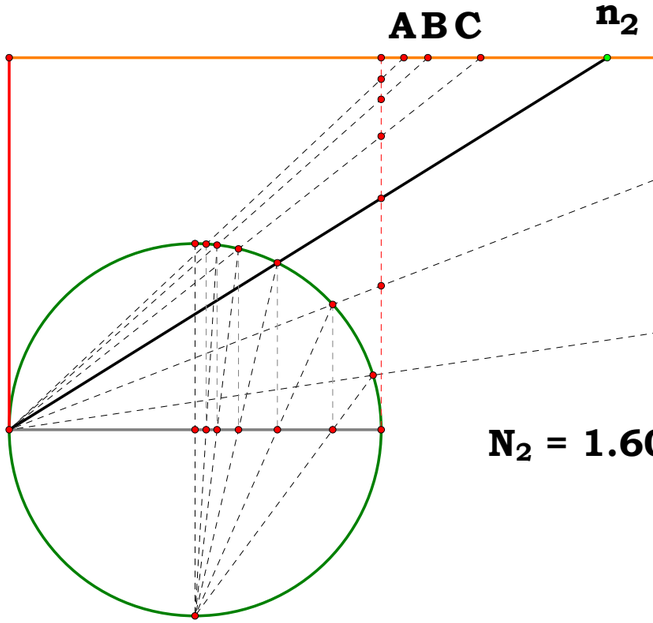
$$\frac{N_1^{2}\cdot(N_2-1)}{N_2\cdot(N_1-1)^{2}}\cdot\frac{N_1\cdot(N_2-1)^{-1}}{N_2\cdot(N_1-1)} = 1.62056 \qquad \left(\frac{N_1^{2}\cdot(N_2-1)}{N_2\cdot(N_1-1)^{2}}\cdot\frac{N_1\cdot(N_2-1)^{-1}}{N_2\cdot(N_1-1)}\right) - A = 0.00000$$

$$\frac{N_1^{2}\cdot(N_2-1)}{N_2\cdot(N_1-1)^{2}}\cdot\frac{N_1\cdot(N_2-1)^{0}}{N_2\cdot(N_1-1)} = 2.12423 \qquad \left(\frac{N_1^{2}\cdot(N_2-1)}{N_2\cdot(N_1-1)^{2}}\cdot\frac{N_1\cdot(N_2-1)^{0}}{N_2\cdot(N_1-1)}\right) - H = 0.00000$$

$$\frac{N_1^{2}\cdot(N_2-1)}{N_2\cdot(N_1-1)^{2}}\cdot\frac{N_1\cdot(N_2-1)^{1}}{N_2\cdot(N_1-1)} = 2.78444 \qquad \left(\frac{N_1^{2}\cdot(N_2-1)}{N_2\cdot(N_1-1)^{2}}\cdot\frac{N_1\cdot(N_2-1)^{1}}{N_2\cdot(N_1-1)}\right) - L = 0.00000$$

$$\frac{N_1^{2}\cdot(N_2-1)}{N_2\cdot(N_1-1)^{2}}\cdot\frac{N_1\cdot(N_2-1)^{2}}{N_2\cdot(N_1-1)} = 3.64985 \qquad \left(\frac{N_1^{2}\cdot(N_2-1)}{N_2\cdot(N_1-1)^{2}}\cdot\frac{N_1\cdot(N_2-1)^{2}}{N_2\cdot(N_1-1)}\right) - M = 0.00000$$

$$\frac{N_1^{2}\cdot(N_2-1)}{N_2\cdot(N_1-1)^{2}}\cdot\frac{N_1\cdot(N_2-1)^{3}}{N_2\cdot(N_1-1)} = 4.78423 \qquad \left(\frac{N_1^{2}\cdot(N_2-1)}{N_2\cdot(N_1-1)^{2}}\cdot\frac{N_1\cdot(N_2-1)^{3}}{N_2\cdot(N_1-1)}\right) - N = 0.00000$$



$N_2 = 1.60736$

$A = 1.06112$

$B = 1.12597$

$C = 1.26782$

$D = 2.58359$

$E = 6.67496$

$N_2^{\frac{1}{8}} = 1.06112$

$N_2^{\frac{1}{4}} = 1.12597$

$N_2^{\frac{1}{2}} = 1.26782$

$N_2^{2} = 2.58359$

$N_2^{4} = 6.67496$

$A^2 = 1.12597$

$B^2 = 1.26782$

$C^2 = 1.60736$

$D^2 = 6.67496$

$A^8 = 1.60736$

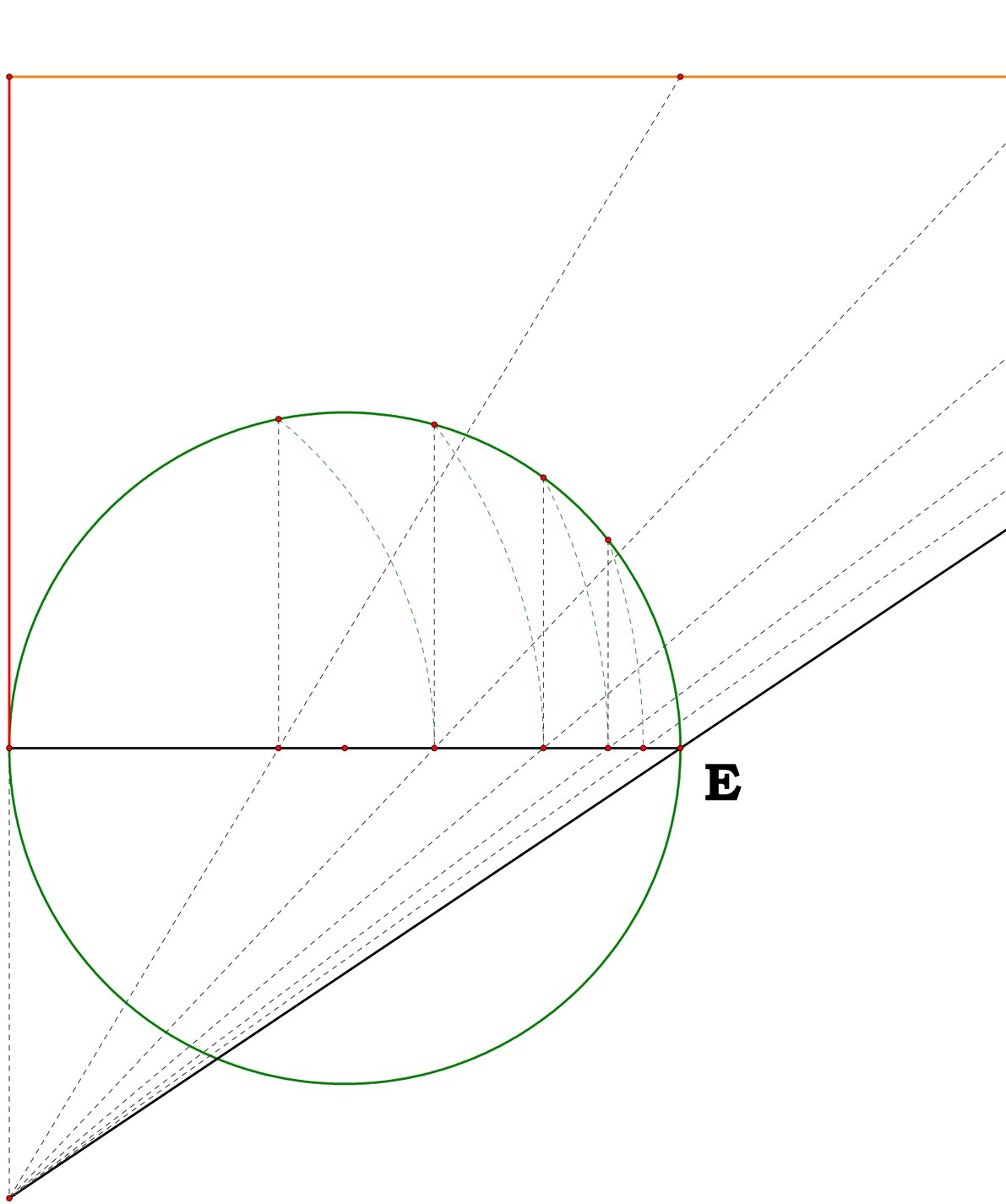
$B^4 = 1.60736$

$C^2 = 1.60736$

$N_2^{1} = 1.60736$

$D^{\frac{1}{2}} = 1.60736$

$E^{\frac{1}{4}} = 1.60736$



$N_1 = 2.49232$

$A = 1.57871$

$B = 1.98360$

$C = 2.22346$

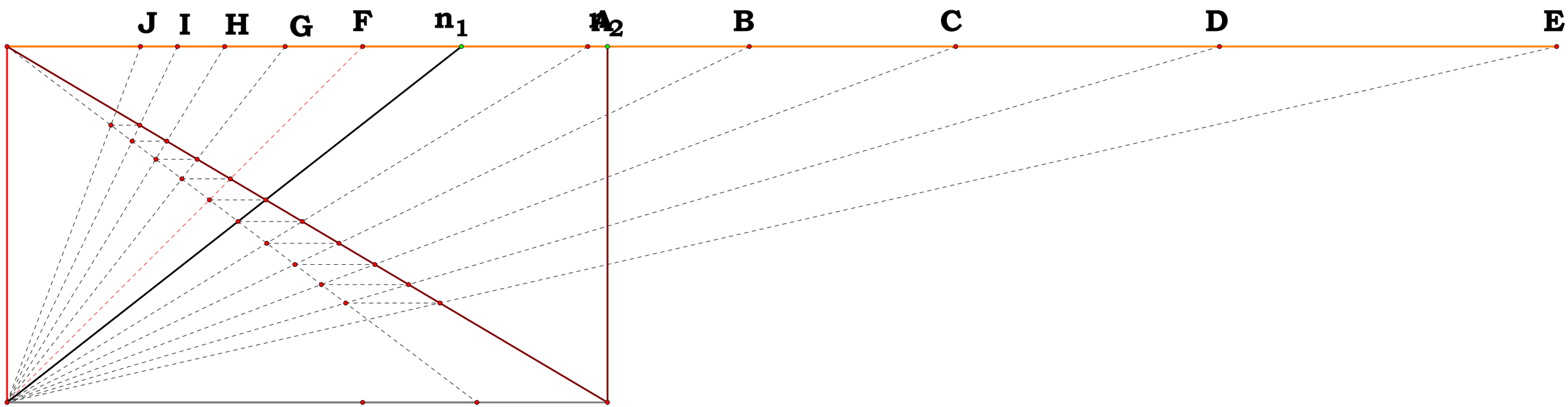
$D = 2.35405$

$N_1^{\frac{1}{2}} - A = 0.00000$

$N_1^{\frac{3}{4}} - B = 0.00000$

$N_1^{\frac{7}{8}} - C = 0.00000$

$N_1^{\frac{15}{16}} - D = 0.00000$



$N_1 = 1.27809$

$N_2 = 1.68896$

$A = 1.63353$

$B = 2.08780$

$C = 2.66841$

$D = 3.41048$

$E = 4.35891$

$F = 1.00000$

$G = 0.78241$

$H = 0.61217$

$I = 0.47897$

$J = 0.37476$

$N_1^2\text{-}A = 0.00000$

$N_1^3\text{-}B = 0.00000$

$N_1^4\text{-}C = 0.00000$

$N_1^5\text{-}D = 0.00000$

$N_1^6\text{-}E = 0.00000$

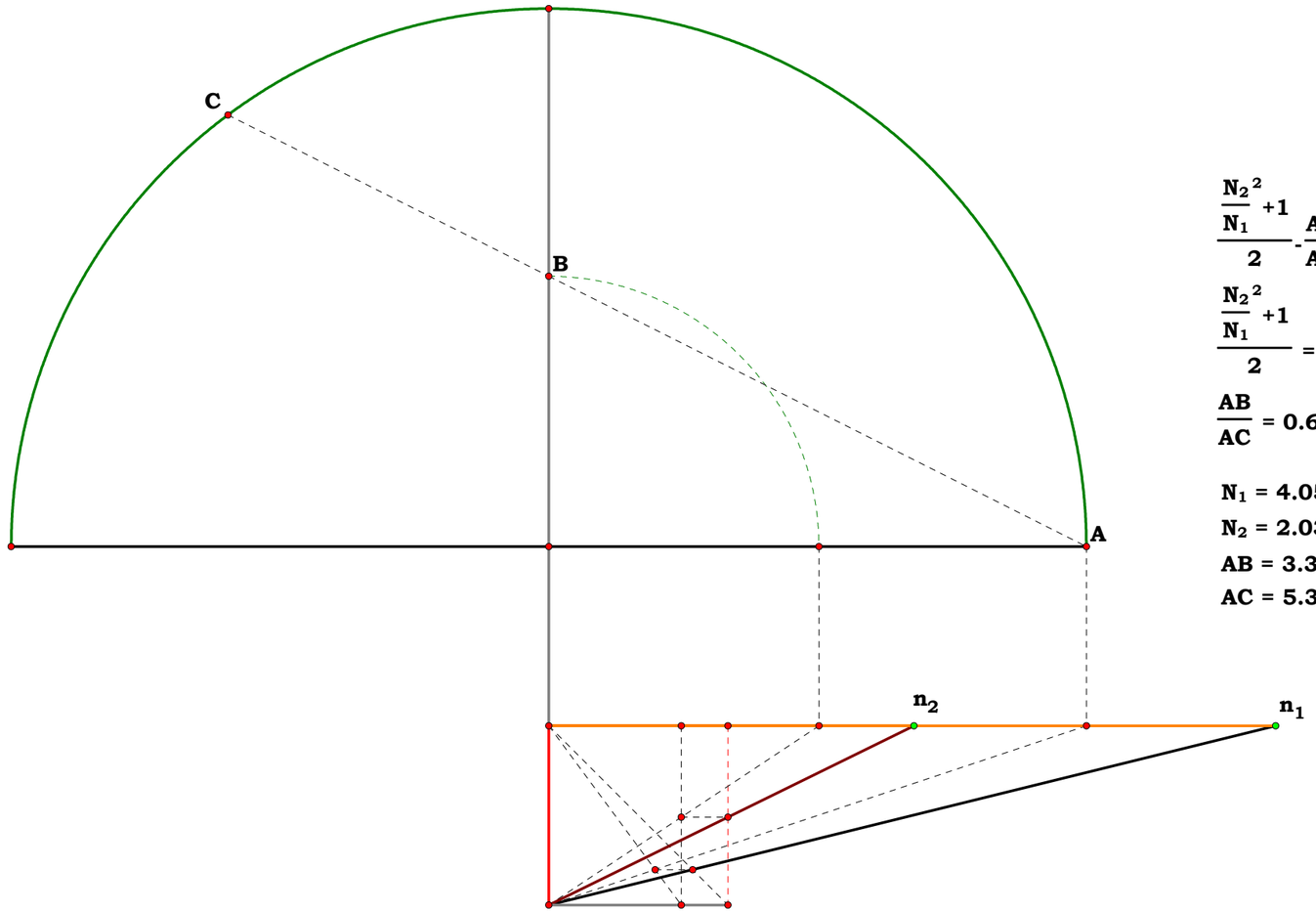
$N_1^0\text{-}F = 0.00000$

$N_1^{-1}\text{-}G = 0.00000$

$N_1^{-2}\text{-}H = 0.00000$

$N_1^{-3}\text{-}I = 0.00000$

$N_1^{-4}\text{-}J = 0.00000$



$$\frac{\frac{N_2^2}{N_1}+1}{2}-\frac{AB}{AC} = 0.00000$$

$$\frac{\frac{N_2^2}{N_1}+1}{2} = 0.62621$$

$$\frac{AB}{AC} = 0.62621$$

$N_1 = 4.05604$

$N_2 = 2.03783$

$AB = 3.35735$

$AC = 5.36137$

Circle
Show Lines
0
1
2
3
4
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7
8
9
10
11
12
13
14
15

Circle
Show Lines
0
1
2
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5
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7
8
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Points
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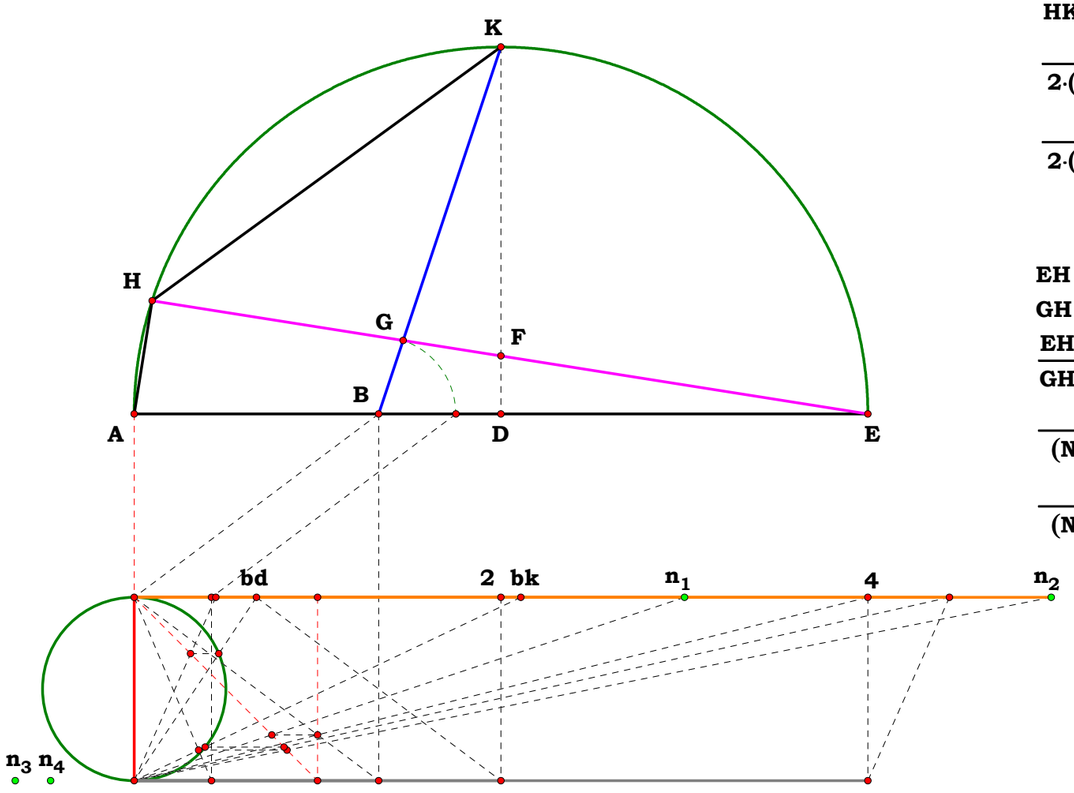

$AH = 0.62385$

$HK = 2.35269$

$\frac{AH}{HK} = 0.26517$

$\frac{\sqrt{2}\cdot N_1}{2\cdot(N_1-1)\cdot(N_2-1)} = 0.26517$

$\frac{\sqrt{2}\cdot N_1}{2\cdot(N_1-1)\cdot(N_2-1)} - \frac{AH}{HK} = 0.00000$

$EH = 3.95105$

$GH = 1.38633$

$\frac{EH}{GH} = 2.85000$

$\frac{N_1\cdot N_2\cdot((2\cdot N_1\cdot N_2-2\cdot N_2-N_1)+2)}{(N_2-1)\cdot((((2\cdot N_1\cdot N_2-2\cdot N_2)+N_1^2)-2\cdot N_1)+2)} = 2.85000$

$\frac{N_1\cdot N_2\cdot((2\cdot N_1\cdot N_2-2\cdot N_2-N_1)+2)}{(N_2-1)\cdot((((2\cdot N_1\cdot N_2-2\cdot N_2)+N_1^2)-2\cdot N_1)+2)} - \frac{EH}{GH} = 0.00000$

$N_1 = 3.00000$

$N_2 = 5.00000$

Points

$bd = 0.66667$

$bd\text{^}2 = 0.44444$

Circle
Show Lines
0
1
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3
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9
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11
12
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15

Circle
Show Lines
0
1
2
3
4
5
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7
8
9
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Points
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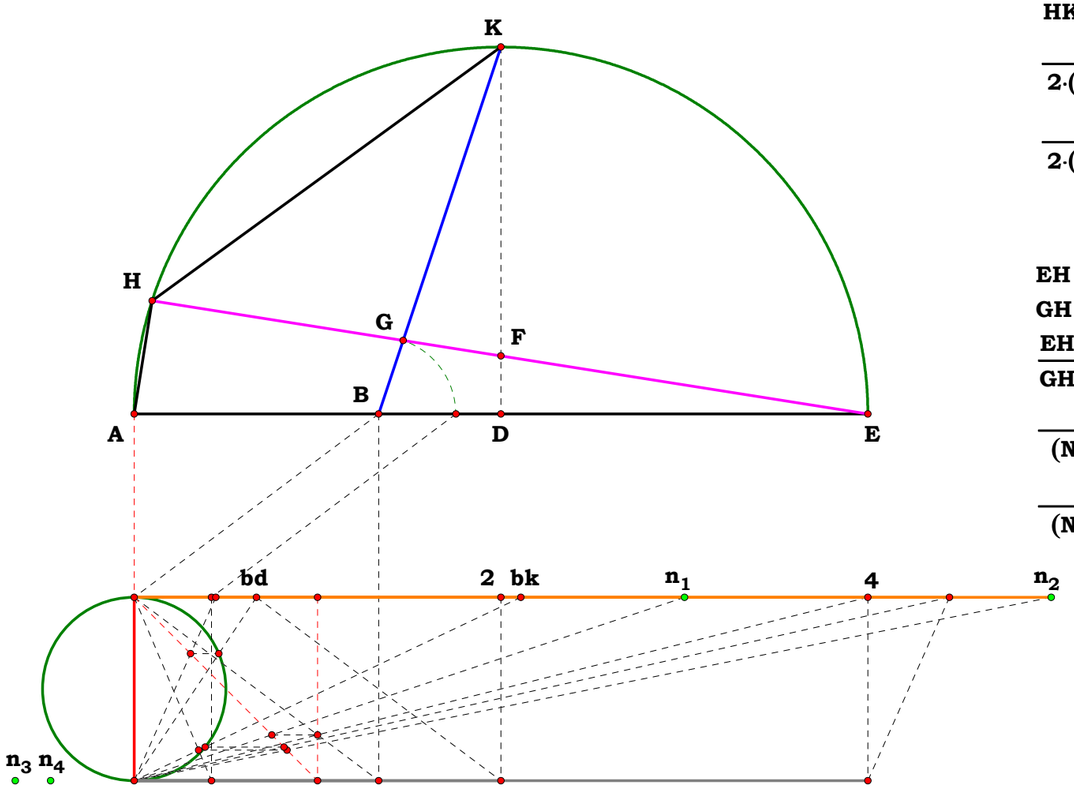


$AH = 0.62385$

$HK = 2.35269$

$\frac{AH}{HK} = 0.26517$

$\frac{\sqrt{2}\cdot N_1}{2\cdot(N_1-1)\cdot(N_2-1)} = 0.26517$

$\frac{\sqrt{2}\cdot N_1}{2\cdot(N_1-1)\cdot(N_2-1)} - \frac{AH}{HK} = 0.00000$

$EH = 3.95105$

$GH = 1.38633$

$\frac{EH}{GH} = 2.85000$

$\frac{N_1\cdot N_2\cdot((2\cdot N_1\cdot N_2-2\cdot N_2-N_1)+2)}{(N_2-1)\cdot((((2\cdot N_1\cdot N_2-2\cdot N_2)+N_1^2)-2\cdot N_1)+2)} = 2.85000$

$\frac{N_1\cdot N_2\cdot((2\cdot N_1\cdot N_2-2\cdot N_2-N_1)+2)}{(N_2-1)\cdot((((2\cdot N_1\cdot N_2-2\cdot N_2)+N_1^2)-2\cdot N_1)+2)} - \frac{EH}{GH} = 0.00000$

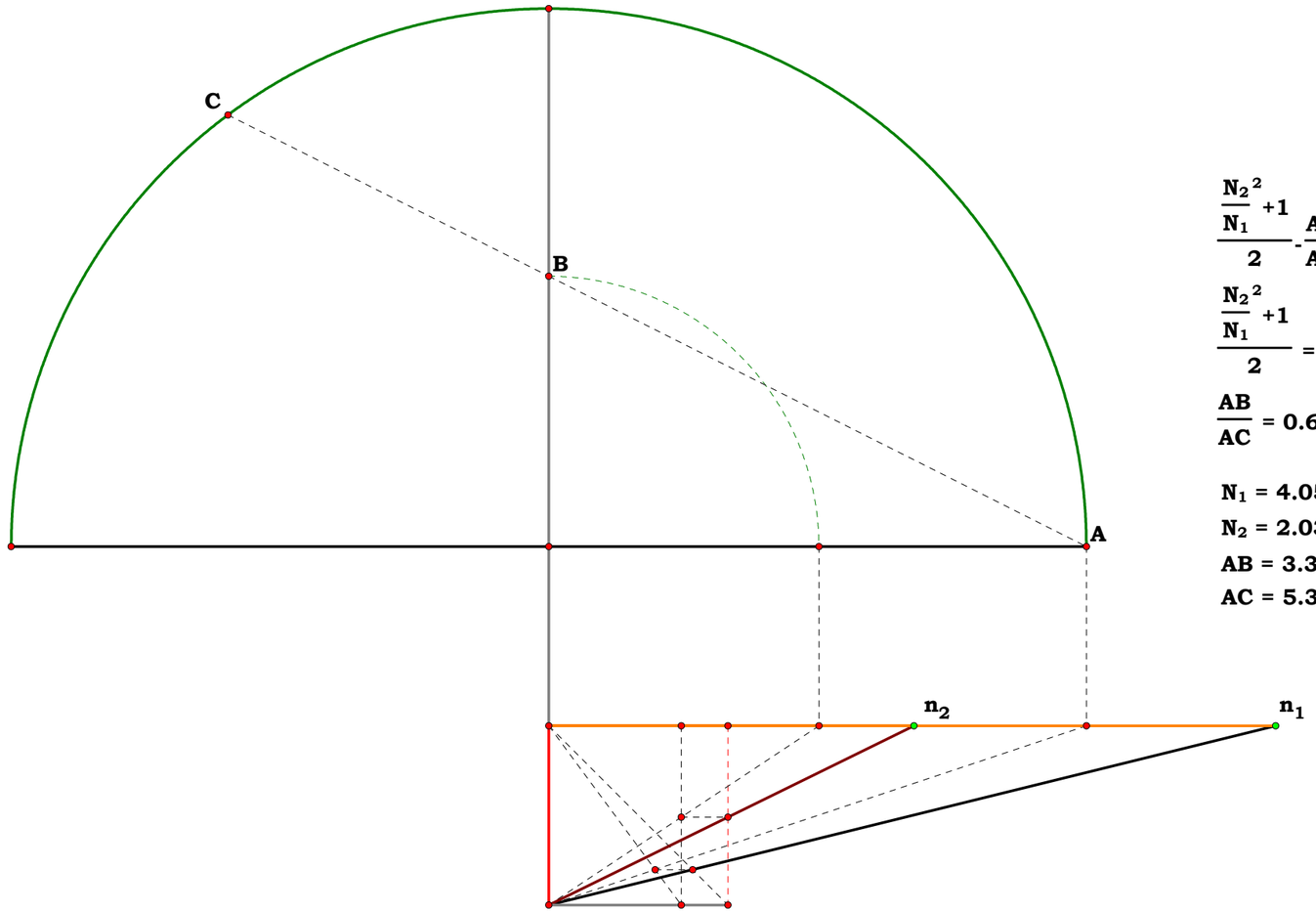
$N_1 = 3.00000$

$N_2 = 5.00000$

Points

$bd = 0.66667$

$bd\text{^}2 = 0.44444$



$$\frac{\frac{N_2^2}{N_1}+1}{2}-\frac{AB}{AC} = 0.00000$$

$$\frac{\frac{N_2^2}{N_1}+1}{2} = 0.62621$$

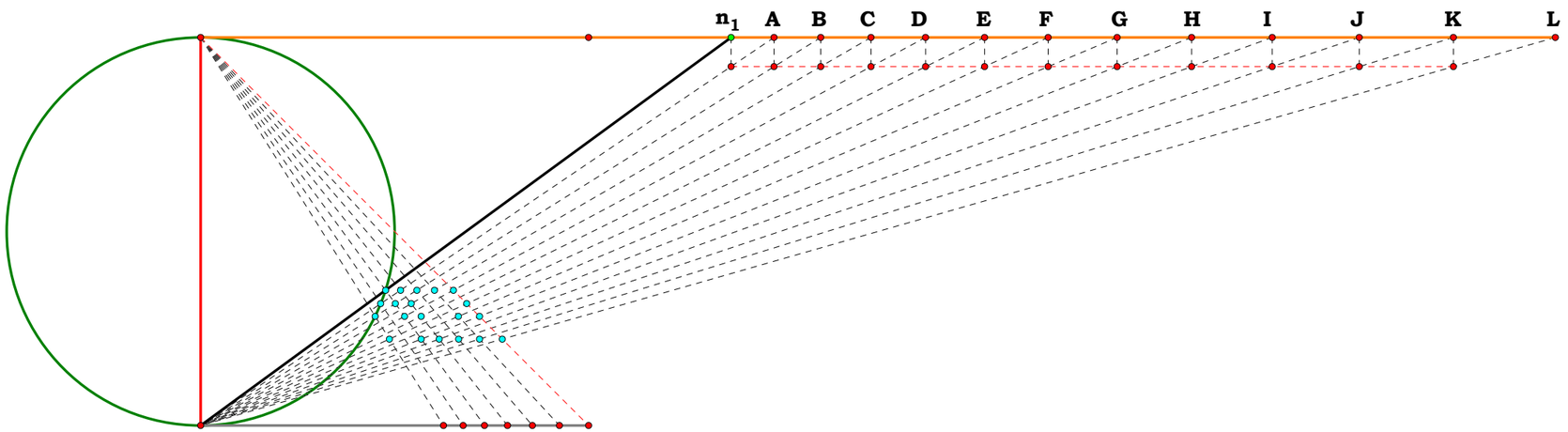
$$\frac{AB}{AC} = 0.62621$$

$N_1 = 4.05604$

$N_2 = 2.03783$

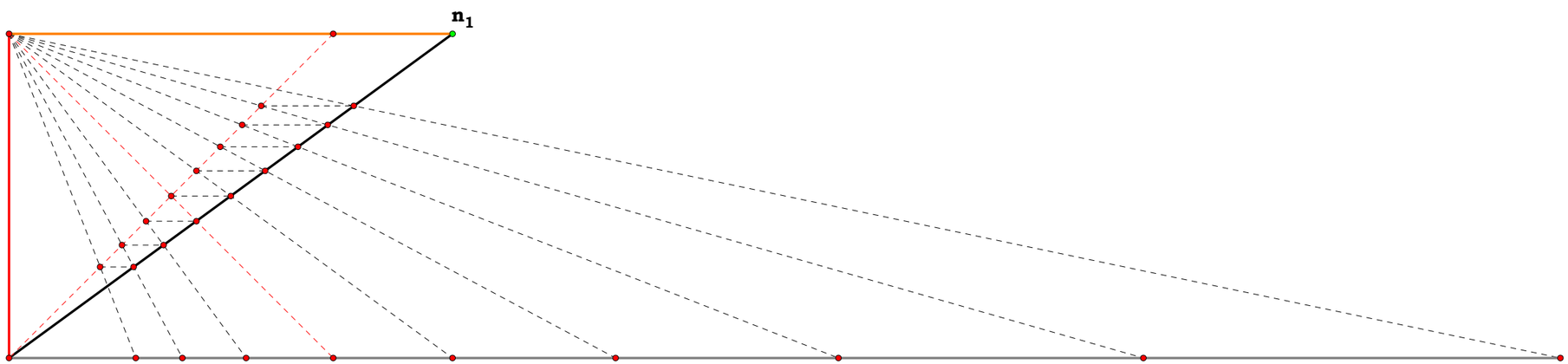
$AB = 3.35735$

$AC = 5.36137$



N_1 = 1.36693

A = 1.47803	E = 2.02036	I = 2.76169	$N_1^{1.25}$-A = 0.00000	$N_1^{2.25}$-E = 0.00000	$N_1^{3.25}$-I = 0.00000
B = 1.59816	F = 2.18457	J = 2.98615	$N_1^{1.5}$-B = 0.00000	$N_1^{2.5}$-F = 0.00000	$N_1^{3.5}$-J = 0.00000
C = 1.72805	G = 2.36212	K = 3.22885	$N_1^{1.75}$-C = 0.00000	$N_1^{2.75}$-G = 0.00000	$N_1^{3.75}$-K = 0.00000
D = 1.86850	H = 2.55410	L = 3.49128	N_1^{2}-D = 0.00000	N_1^{3}-H = 0.00000	N_1^{4}-L = 0.00000



$N_1 = 1.36763$

$A = 1.00000$
$B = 1.36763$
$C = 1.87042$
$D = 2.55805$

$E = 3.49847$
$F = 4.78462$
$G = 0.73119$
$H = 0.53464$
$I = 0.39092$

$N_1^0\text{-}A = 0.00000$
$N_1^1\text{-}B = 0.00000$
$N_1^2\text{-}C = 0.00000$
$N_1^3\text{-}D = 0.00000$

$N_1^4\text{-}E = 0.00000$
$N_1^5\text{-}F = 0.00000$
$N_1^{-1}\text{-}G = 0.00000$
$N_1^{-2}\text{-}H = 0.00000$
$N_1^{-3}\text{-}I = 0.00000$

$N_1 = 2.10483$

$N_2 = 2.59960$

$x_A = 2.10483$

$x_B = 2.59960$

$x_C = 3.21068$

$x_D = 3.96539$

$x_E = 4.89752$

$x_F = 1.70423$

$x_G = 1.37987$

$x_H = 1.11724$

$x_I = 0.90460$

$\frac{N_2^0}{N_1^{-1}} = 2.10483$

$\frac{N_2^1}{N_1^0} = 2.59960$

$\frac{N_2^2}{N_1^1} = 3.21068$

$\frac{N_2^3}{N_1^2} = 3.96539$

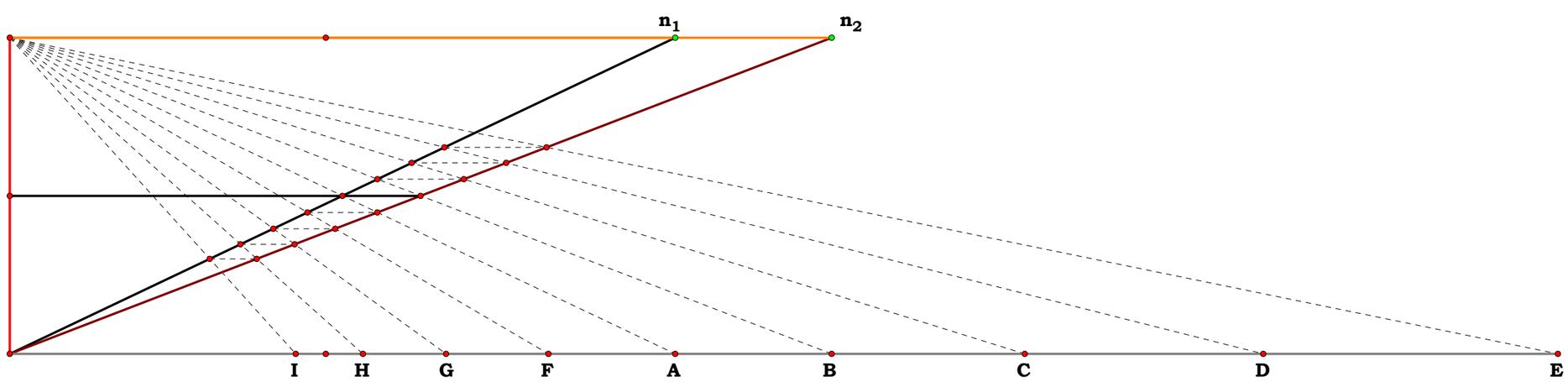
$\frac{N_2^4}{N_1^3} = 4.89752$

$\frac{N_2^{-1}}{N_1^{-2}} = 1.70423$

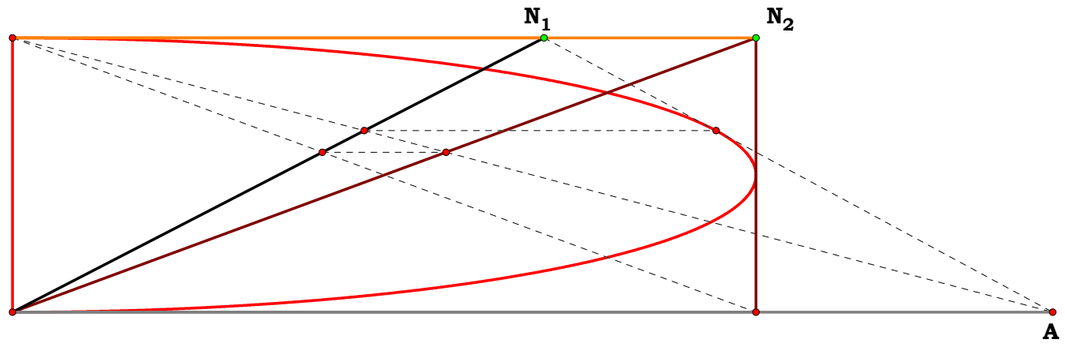
$\frac{N_2^{-2}}{N_1^{-3}} = 1.37987$

$\frac{N_2^{-3}}{N_1^{-4}} = 1.11724$

$\frac{N_2^{-4}}{N_1^{-5}} = 0.90460$



From any point N_1 draw the tangent to the ellipse N_2. Or given the square N_2 divide it by N_1.



$N_1 = 1.93770$ $A = 3.79224$

$N_2 = 2.71076$ $\frac{N_2^2}{N_1} - A = 0.00000$

A^2-B = 0.00000
(A·B)-C = 0.00000
B^2-D = 0.00000
(B·C)-E = 0.00000

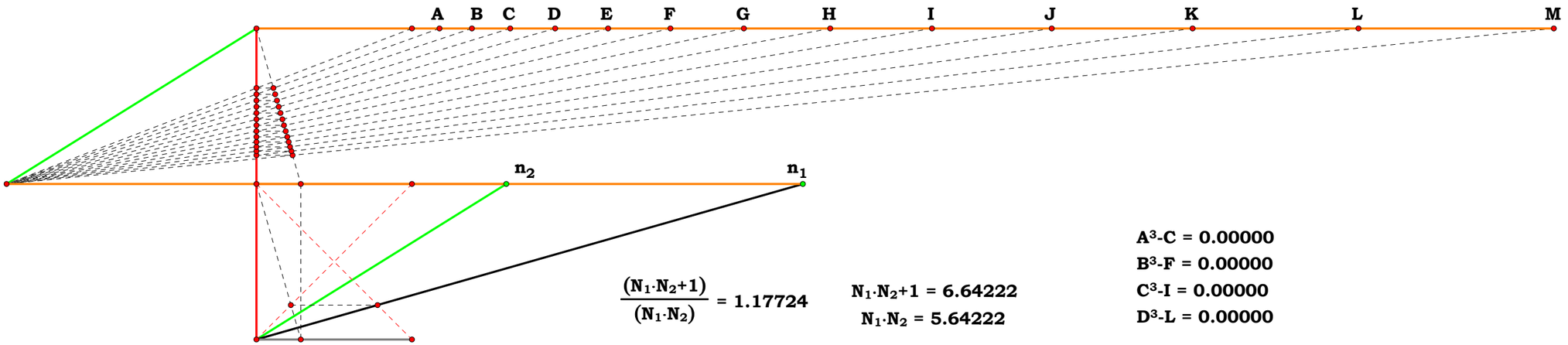
C^2-F = 0.00000
(C·D)-G = 0.00000
D^2-H = 0.00000
(D·E)-I = 0.00000

E^2-J = 0.00000
(E·F)-K = 0.00000
F^2-L = 0.00000
(F·G)-M = 0.00000

$\frac{N_1 \cdot N_2 + 1}{N_1 \cdot N_2}^{1}$ -A = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{2}$ -B = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{3}$ -C = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{4}$ -D = 0.00000

$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{5}$ -E = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{6}$ -F = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{7}$ -G = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{8}$ -H = 0.00000

$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{9}$ -I = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{10}$ -J = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{11}$ -K = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{12}$ -L = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{13}$ -M = 0.00000



$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}$ = 1.17724

$N_1 \cdot N_2 + 1$ = 6.64222
$N_1 \cdot N_2$ = 5.64222

A^3-C = 0.00000
B^3-F = 0.00000
C^3-I = 0.00000
D^3-L = 0.00000

N_1 = 3.51340
N_2 = 1.60591

A = 1.17724
B = 1.38588
C = 1.63151
D = 1.92067
E = 2.26108

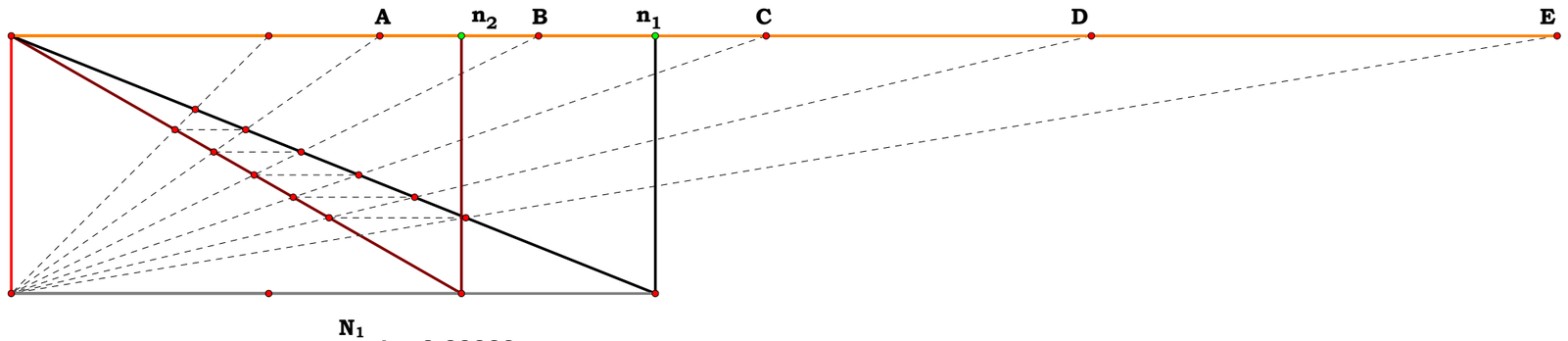
F = 2.66183
G = 3.13360
H = 3.68898
I = 4.34280

J = 5.11249
K = 6.01861
L = 7.08532
M = 8.34108

A^2 = 1.38588
A·B = 1.63151
B^2 = 1.92067
B·C = 2.26108

C^2 = 2.66183
C·D = 3.13360
D^2 = 3.68898
D·E = 4.34280

E^2 = 5.11249
E·F = 6.01861
F^2 = 7.08532
F·G = 8.34108



A = 1.43109

B = 2.04801

C = 2.93088

D = 4.19435

E = 6.00248

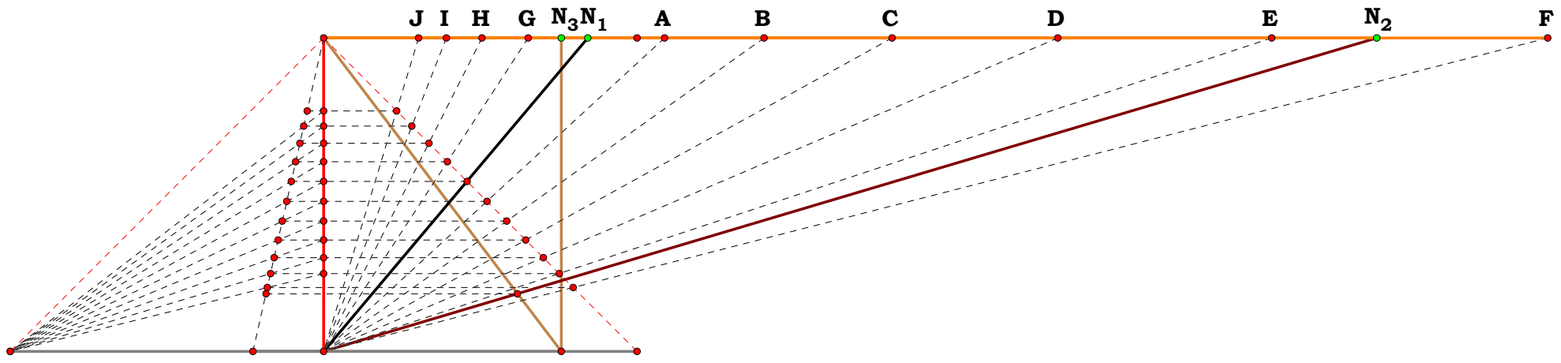
$$\frac{N_1}{N_2} - A = 0.00000$$

$$\frac{N_1^{\,2}}{N_2} - B = 0.00000$$

$$\frac{N_1^{\,3}}{N_2} - C = 0.00000$$

$$\frac{N_1^{\,4}}{N_2} - D = 0.00000$$

$$\frac{N_1^{\,5}}{N_2} - E = 0.00000$$



$$\frac{N_1^{\frac{1}{4}} \cdot N_2^{\,4}}{N_2 - N_3} - D = 0.00000$$

$$\frac{N_1 \cdot N_2^{\,4}}{(N_2 - N_3)^4} - D = 0.00000$$

$$\frac{N_2}{N_2 - N_3} = 1.29123$$

$N_1 = 0.84255$

$N_2 = 3.35986$

$N_3 = 0.75780$

$A = 1.08792$ $G = 0.65251$

$B = 1.40476$ $H = 0.50534$

$C = 1.81388$ $I = 0.39136$

$D = 2.34214$ $J = 0.30309$

$E = 3.02425$

$F = 3.90501$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{1} \cdot N_1 - A = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{2} \cdot N_1 - B = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{3} \cdot N_1 - C = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{4} \cdot N_1 - D = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{5} \cdot N_1 - E = 0.00000$$

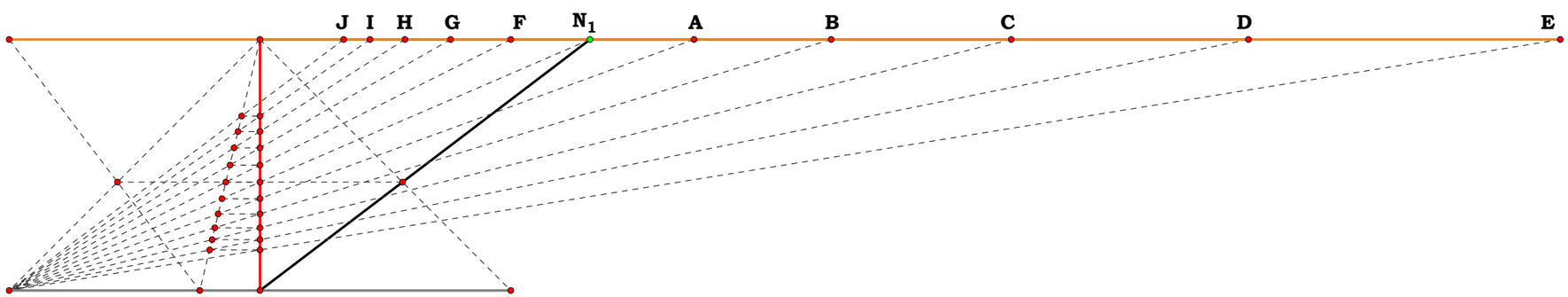
$$\left(\frac{N_2}{N_2 - N_3}\right)^{6} \cdot N_1 - F = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{-1} \cdot N_1 - G = 0.00000$$

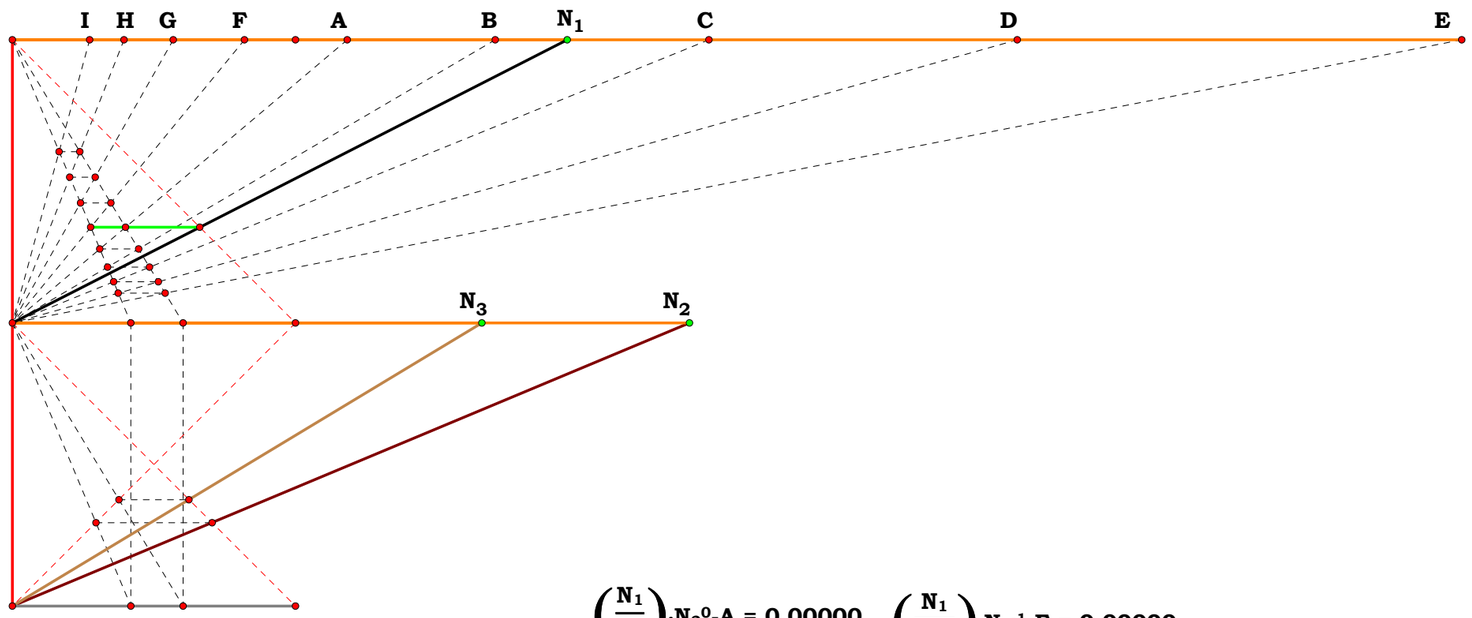
$$\left(\frac{N_2}{N_2 - N_3}\right)^{-2} \cdot N_1 - H = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{-3} \cdot N_1 - I = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{-4} \cdot N_1 - J = 0.00000$$



N_1 = 1.31554	A = 1.73065	F = 1.00000	N_1^2-A = 0.00000	N_1^0-F = 0.00000
	B = 2.27675	G = 0.76014	N_1^3-B = 0.00000	N_1^{-1}-G = 0.00000
	C = 2.99516	H = 0.57782	N_1^4-C = 0.00000	N_1^{-2}-H = 0.00000
	D = 3.94026	I = 0.43922	N_1^5-D = 0.00000	N_1^{-3}-I = 0.00000
	E = 5.18358	J = 0.33387	N_1^6-E = 0.00000	N_1^{-4}-J = 0.00000



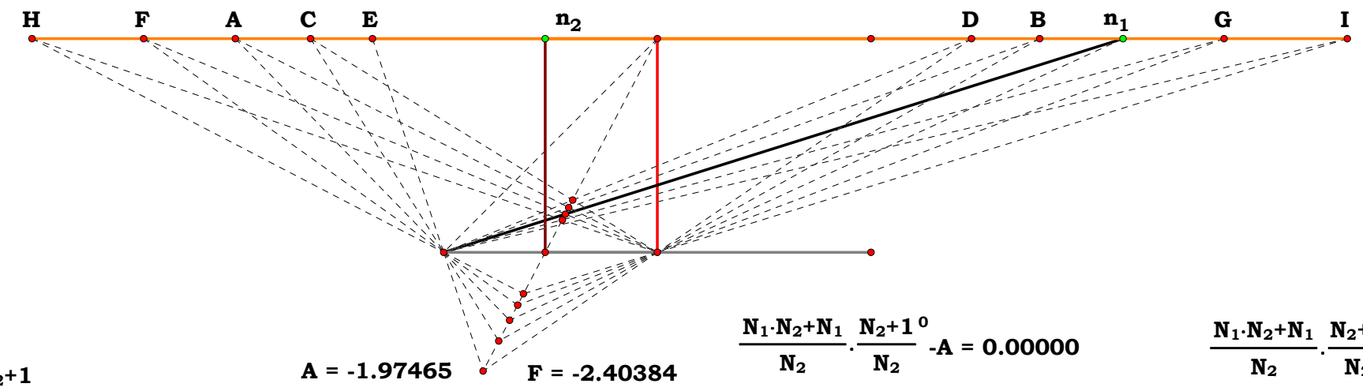
$N_1 = 1.95987$
$N_2 = 2.39124$
$N_3 = 1.65771$

$A = 1.18227$
$B = 1.70541$
$C = 2.46005$
$D = 3.54859$
$E = 5.11881$

$F = 0.81960$
$G = 0.56819$
$H = 0.39389$
$I = 0.27306$

$\left(\frac{N_1}{N_3}\right)\cdot N_2^{0}\text{-}A = 0.00000$
$\left(\frac{N_1}{N_3^{2}}\right)\cdot N_2\text{-}B = 0.00000$
$\left(\frac{N_1}{N_3^{3}}\right)\cdot N_2^{2}\text{-}C = 0.00000$
$\left(\frac{N_1}{N_3^{4}}\right)\cdot N_2^{3}\text{-}D = 0.00000$
$\left(\frac{N_1}{N_3^{5}}\right)\cdot N_2^{4}\text{-}E = 0.00000$

$\left(\frac{N_1}{N_3^{0}}\right)\cdot N_2^{-1}\text{-}F = 0.00000$
$\left(\frac{N_1}{N_3^{-1}}\right)\cdot N_2^{-2}\text{-}G = 0.00000$
$\left(\frac{N_1}{N_3^{-2}}\right)\cdot N_2^{-3}\text{-}H = 0.00000$
$\left(\frac{N_1}{N_3^{-3}}\right)\cdot N_2^{-4}\text{-}I = 0.00000$



$\frac{N_2+1}{N_2} = -0.90634$

$\frac{N_1 \cdot N_2+N_1}{N_2} = -1.97465$

$N_1 = 2.17870$

$N_2 = -0.52456$

A = -1.97465

B = 1.78970

C = -1.62208

D = 1.47016

E = -1.33247

F = -2.40384

G = 2.65225

H = -2.92632

I = 3.22872

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{0} -A = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{1} -B = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{2} -C = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{3} -D = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{4} -E = 0.00000$

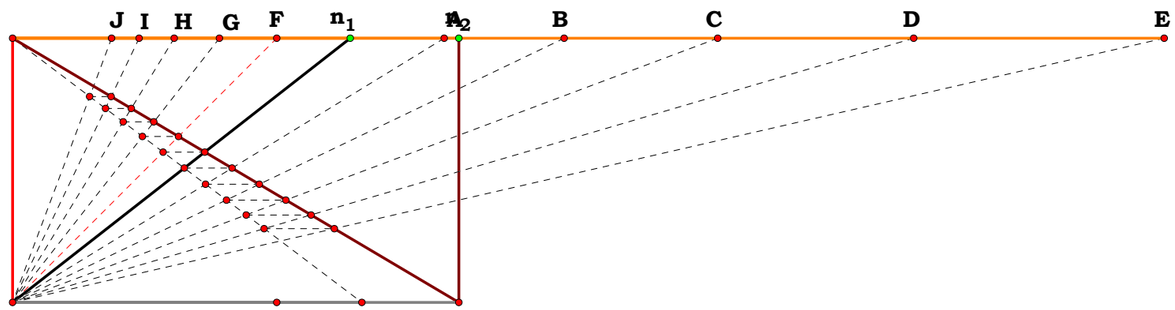
$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-1} -N_1 = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-2} -F = 0.00000$

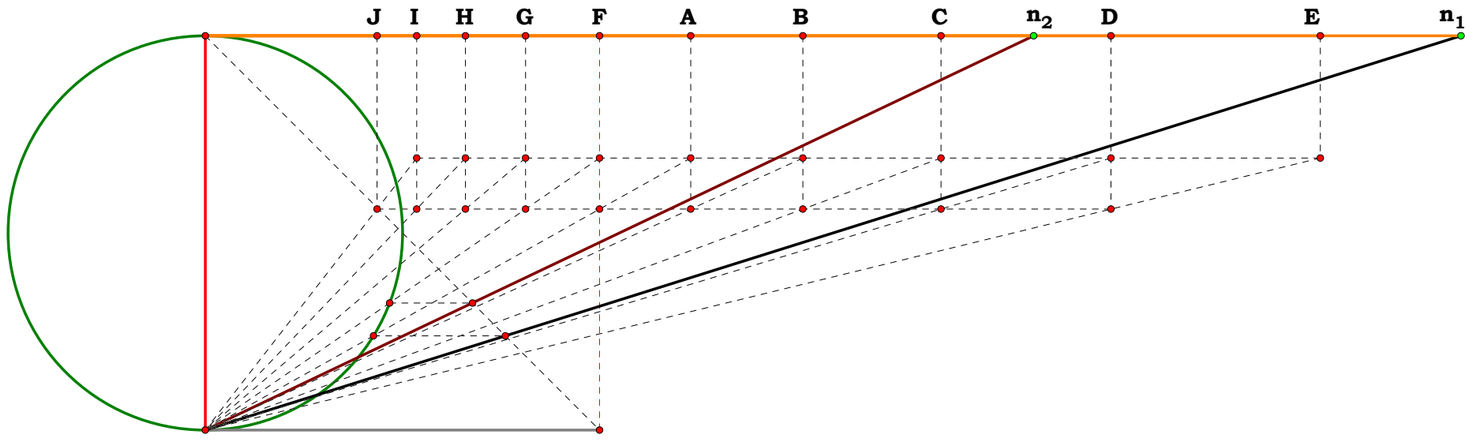
$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-3} -G = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-4} -H = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-5} -I = 0.00000$



	A = 1.63353	F = 1.00000	N_1^2-A = 0.00000	N_1^0-F = 0.00000
N_1 = 1.27809	B = 2.08780	G = 0.78241	N_1^3-B = 0.00000	N_1^{-1}-G = 0.00000
N_2 = 1.68896	C = 2.66841	H = 0.61217	N_1^4-C = 0.00000	N_1^{-2}-H = 0.00000
	D = 3.41048	I = 0.47897	N_1^5-D = 0.00000	N_1^{-3}-I = 0.00000
	E = 4.35891	J = 0.37476	N_1^6-E = 0.00000	N_1^{-4}-J = 0.00000



$\frac{\sqrt{N_1}}{\sqrt{N_2}} = 1.23112$

$N_1 = 3.18458$

$N_2 = 2.10112$

A = 1.23112

B = 1.51566

C = 1.86597

D = 2.29723

E = 2.82817

F = 1.00000

G = 0.81227

H = 0.65978

I = 0.53592

J = 0.43531

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^1$ -A = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^2$ -B = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^3$ -C = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^4$ -D = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^5$ -E = 0.00000

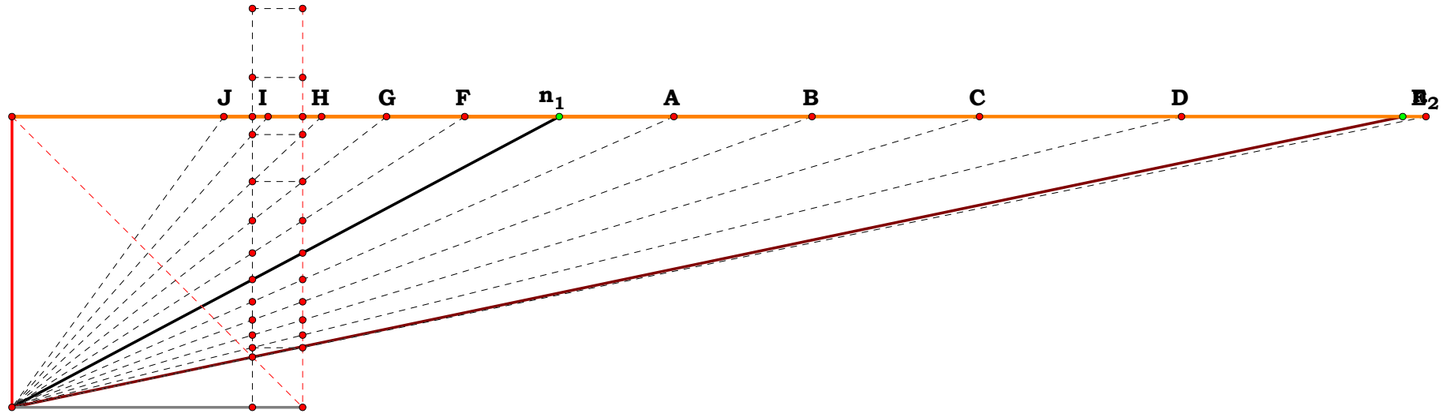
$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^0$ -F = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^{-1}$ -G = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^{-2}$ -H = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^{-3}$ -I = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^{-4}$ -J = 0.00000



$$\frac{N_1 \cdot N_2 + N_1}{N_2} = 2.27629$$

$$\frac{N_2 + 1}{N_2} = 1.20903$$

$N_1 = 1.88273$

$N_2 = 4.78390$

A = 2.27629
B = 2.75211
C = 3.32740
D = 4.02294
E = 4.86387

F = 1.55722
G = 1.28799
H = 1.06530
I = 0.88112
J = 0.72878

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,0}}{N_2} - A = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,1}}{N_2} - B = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,2}}{N_2} - C = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,3}}{N_2} - D = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,4}}{N_2} - E = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-1}}{N_2} - N_1 = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-2}}{N_2} - F = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-3}}{N_2} - G = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-4}}{N_2} - H = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-5}}{N_2} - I = 0.00000$$

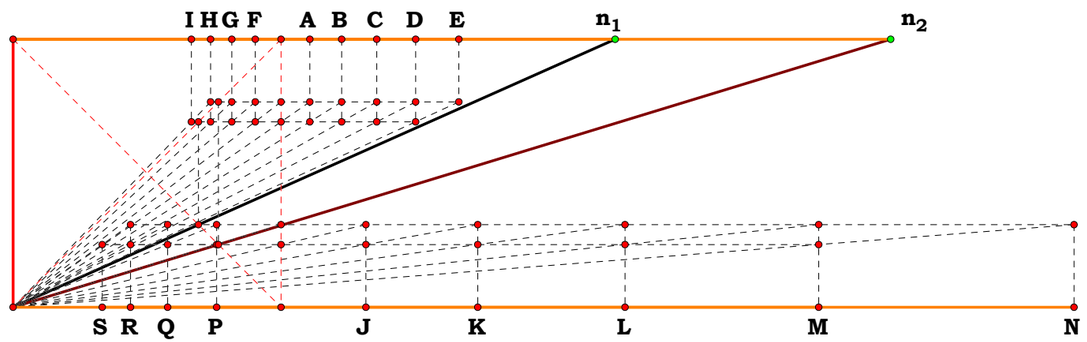
$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-6}}{N_2} - J = 0.00000$$

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)} = 1.10710$$

A = 1.10710
B = 1.22567
C = 1.35694
D = 1.50227
E = 1.66316
F = 0.90326
G = 0.81588
H = 0.73695
I = 0.66566

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{1} - A = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{2} - B = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{3} - C = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{4} - D = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{5} - E = 0.00000$$

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{-1} - F = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{-2} - G = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{-3} - H = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{-4} - I = 0.00000$$



$$\frac{N_2+1}{N_1+1} = 1.31677$$

N_1 = 2.24615
N_2 = 3.27442

J = 1.31677
K = 1.73387
L = 2.28310
M = 3.00631
N = 3.95861

P = 0.75944
Q = 0.57674
R = 0.43800
S = 0.33263

$$\frac{N_2+1}{N_1+1}^{1} - J = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{2} - K = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{3} - L = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{4} - M = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{5} - N = 0.00000$$

$$\frac{N_2+1}{N_1+1}^{-1} - P = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{-2} - Q = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{-3} - R = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{-4} - S = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2} = 0.83725$$

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot N_2+N_1} = 1.12397$$

A = 0.83725
B = 0.94105
C = 1.05771
D = 1.18884
E = 1.33622

F = 0.74490
G = 0.66274
H = 0.58964
I = 0.52461

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{0}}{N_1\cdot N_2+N_1} - A = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{1}}{N_1\cdot N_2+N_1} - B = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{2}}{N_1\cdot N_2+N_1} - C = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{3}}{N_1\cdot N_2+N_1} - D = 0.00000$$

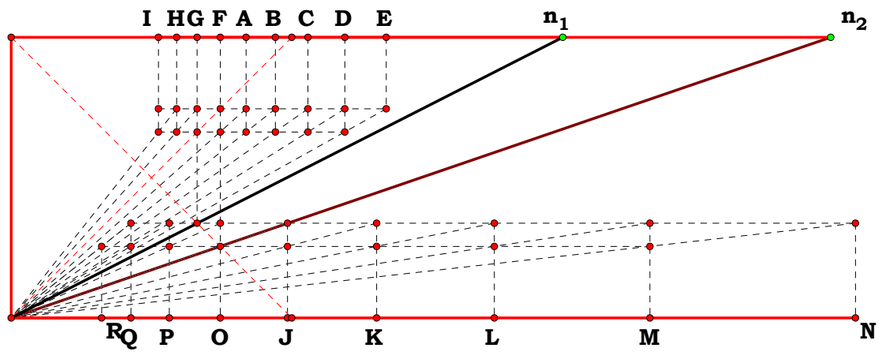
$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{4}}{N_1\cdot N_2+N_1} - E = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-1}}{N_1\cdot N_2+N_1} - F = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-2}}{N_1\cdot N_2+N_1} - G = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-3}}{N_1\cdot N_2+N_1} - H = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-4}}{N_1\cdot N_2+N_1} - I = 0.00000$$



$$\frac{N_2}{N_1+1} = 0.98482$$

$$\frac{N_2+1}{N_1+1} = 1.32208$$

N_1 = 1.96510
N_2 = 2.92011

J = 0.98482
K = 1.30202
L = 1.72138
M = 2.27580
N = 3.00879

O = 0.74490
P = 0.56343
Q = 0.42617
R = 0.32235

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{0}}{N_1+1} - J = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{1}}{N_1+1} - K = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{2}}{N_1+1} - L = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{3}}{N_1+1} - M = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{4}}{N_1+1} - N = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-1}}{N_1+1} - O = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-2}}{N_1+1} - P = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-3}}{N_1+1} - Q = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-4}}{N_1+1} - R = 0.00000$$

B = 1.31080
C = 1.71820
D = 2.25222
E = 2.95221
F = 3.86977
G = 5.07250

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)} = 1.31080 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{1} - B = 0.00000$$

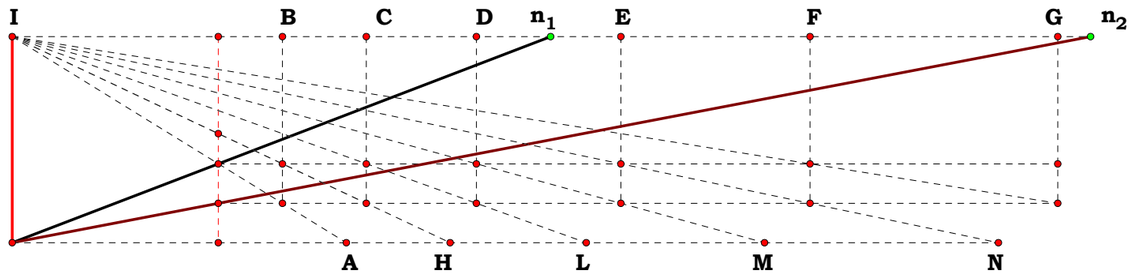
$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2} = 1.71820 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2} - C = 0.00000$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3} = 2.25222 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3} - D = 0.00000$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{4} = 2.95221 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{4} - E = 0.00000$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{5} = 3.86977 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{5} - F = 0.00000$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{6} = 5.07250 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{6} - G = 0.00000$$



$$\frac{N_1}{N_1-1} - A = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2} = 2.12423$$

N_1 = 2.61146
N_2 = 5.23175

A = 1.62056
H = 2.12423
L = 2.78444
M = 3.64985
N = 4.78423

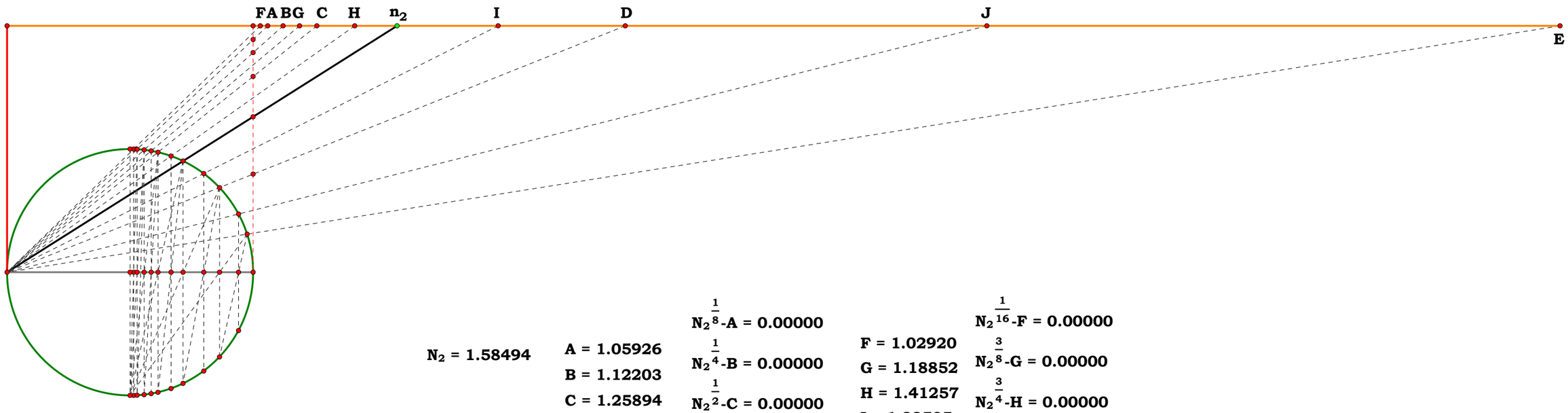
$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{-1} = 1.62056 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{-1}\right) - A = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{0} = 2.12423 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{0}\right) - H = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{1} = 2.78444 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{1}\right) - L = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2} = 3.64985 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2}\right) - M = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3} = 4.78423 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3}\right) - N = 0.00000$$



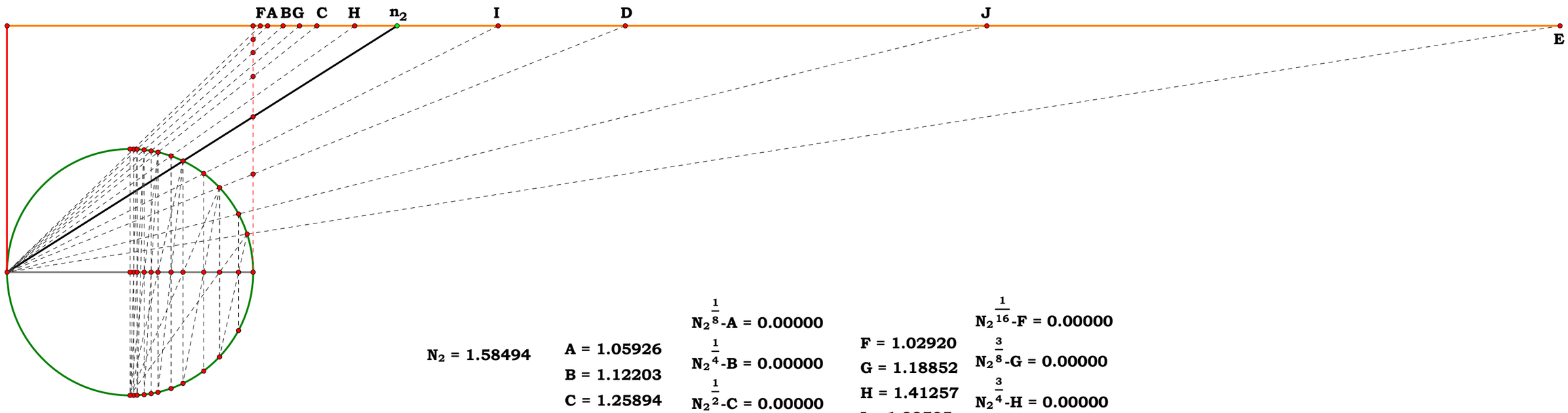
$N_2 = 1.58494$

$A = 1.05926$
$B = 1.12203$
$C = 1.25894$
$D = 2.51204$
$E = 6.31034$

$N_2^{\frac{1}{8}}\text{-}A = 0.00000$
$N_2^{\frac{1}{4}}\text{-}B = 0.00000$
$N_2^{\frac{1}{2}}\text{-}C = 0.00000$
$N_2^{2}\text{-}D = 0.00000$
$N_2^{4}\text{-}E = 0.00000$

$F = 1.02920$
$G = 1.18852$
$H = 1.41257$
$I = 1.99535$
$J = 3.98144$

$N_2^{\frac{1}{16}}\text{-}F = 0.00000$
$N_2^{\frac{3}{8}}\text{-}G = 0.00000$
$N_2^{\frac{3}{4}}\text{-}H = 0.00000$
$N_2^{\frac{3}{2}}\text{-}I = 0.00000$
$N_2^{3}\text{-}J = 0.00000$



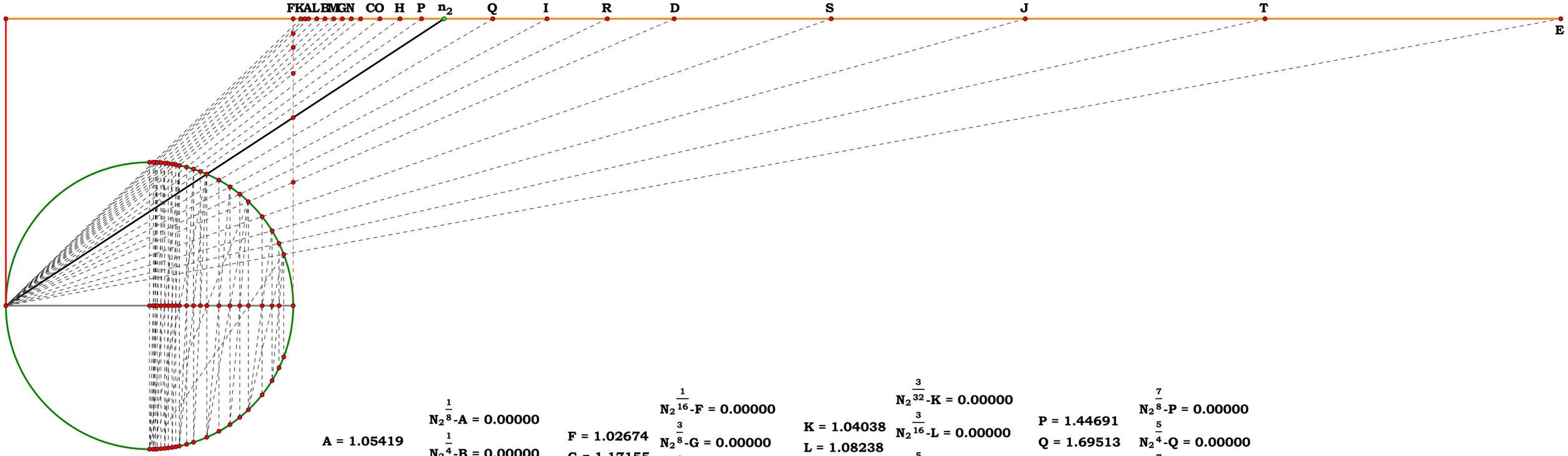
$N_2 = 1.58494$

$A = 1.05926$
$B = 1.12203$
$C = 1.25894$
$D = 2.51204$
$E = 6.31034$

$N_2^{\frac{1}{8}}\text{-}A = 0.00000$
$N_2^{\frac{1}{4}}\text{-}B = 0.00000$
$N_2^{\frac{1}{2}}\text{-}C = 0.00000$
$N_2^{2}\text{-}D = 0.00000$
$N_2^{4}\text{-}E = 0.00000$

$F = 1.02920$
$G = 1.18852$
$H = 1.41257$
$I = 1.99535$
$J = 3.98144$

$N_2^{\frac{1}{16}}\text{-}F = 0.00000$
$N_2^{\frac{3}{8}}\text{-}G = 0.00000$
$N_2^{\frac{3}{4}}\text{-}H = 0.00000$
$N_2^{\frac{3}{2}}\text{-}I = 0.00000$
$N_2^{3}\text{-}J = 0.00000$



$N_2 = 1.52533$

A = 1.05419
B = 1.11132
C = 1.23504
D = 2.32662
E = 5.41318

$N_2^{\frac{1}{8}}$-A = 0.00000
$N_2^{\frac{1}{4}}$-B = 0.00000
$N_2^{\frac{1}{2}}$-C = 0.00000
N_2^{2}-D = 0.00000
N_2^{4}-E = 0.00000

F = 1.02674
G = 1.17155
H = 1.37253
I = 1.88384
J = 3.54886

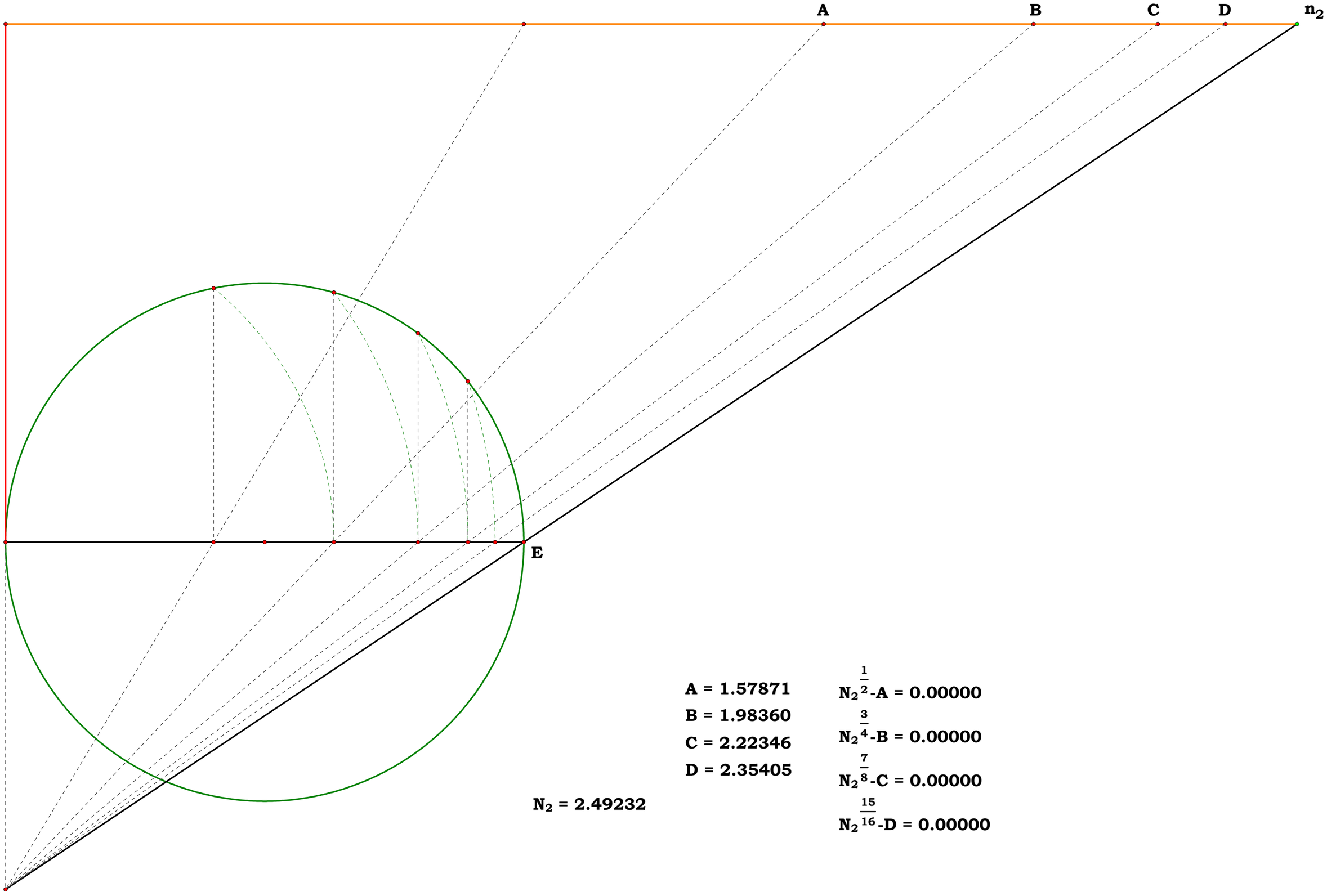
$N_2^{\frac{1}{16}}$-F = 0.00000
$N_2^{\frac{3}{8}}$-G = 0.00000
$N_2^{\frac{3}{4}}$-H = 0.00000
$N_2^{\frac{3}{2}}$-I = 0.00000
N_2^{3}-J = 0.00000

K = 1.04038
L = 1.08238
M = 1.14104
N = 1.20288
O = 1.30197

$N_2^{\frac{3}{32}}$-K = 0.00000
$N_2^{\frac{3}{16}}$-L = 0.00000
$N_2^{\frac{5}{16}}$-M = 0.00000
$N_2^{\frac{7}{16}}$-N = 0.00000
$N_2^{\frac{5}{8}}$-O = 0.00000

P = 1.44691
Q = 1.69513
R = 2.09356
S = 2.87348
T = 4.38299

$N_2^{\frac{7}{8}}$-P = 0.00000
$N_2^{\frac{5}{4}}$-Q = 0.00000
$N_2^{\frac{7}{4}}$-R = 0.00000
$N_2^{\frac{5}{2}}$-S = 0.00000
$N_2^{\frac{7}{2}}$-T = 0.00000



$A = 1.57871$

$B = 1.98360$

$C = 2.22346$

$D = 2.35405$

$N_2 = 2.49232$

$N_2^{\frac{1}{2}} - A = 0.00000$

$N_2^{\frac{3}{4}} - B = 0.00000$

$N_2^{\frac{7}{8}} - C = 0.00000$

$N_2^{\frac{15}{16}} - D = 0.00000$

Circle
Show Lines
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Circle
Show Lines
0
1
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Points
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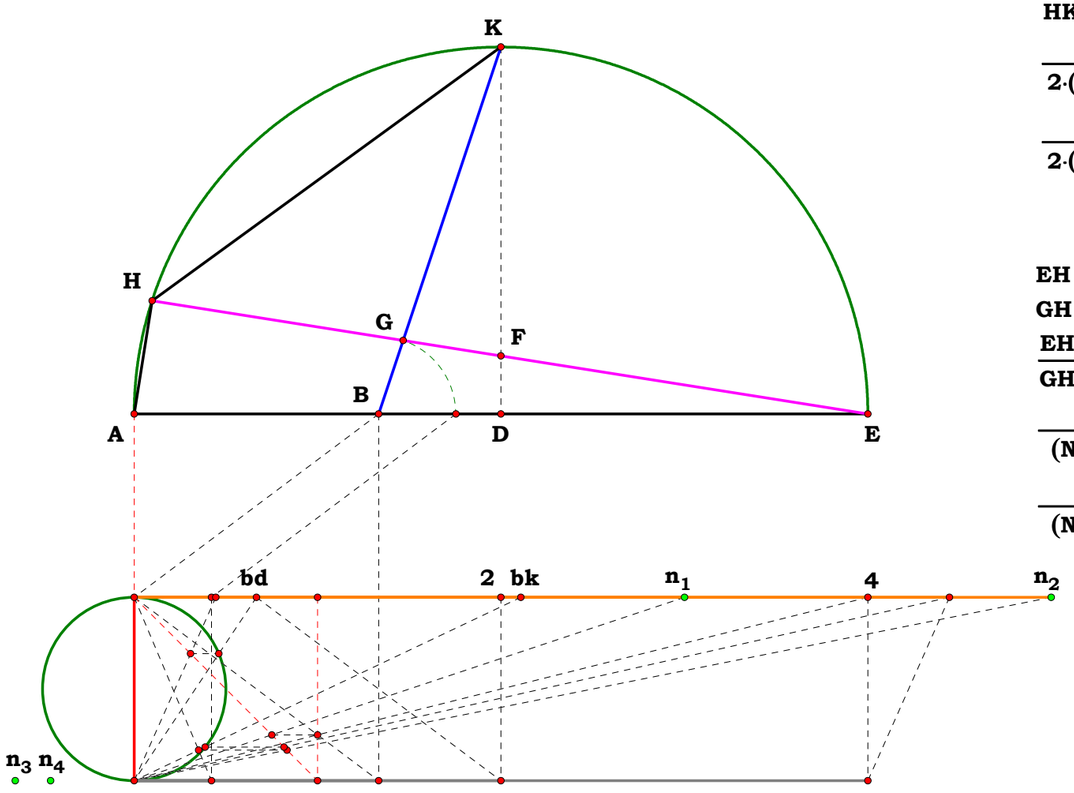


$AH = 0.62385$

$HK = 2.35269$

$\frac{AH}{HK} = 0.26517$

$\frac{\sqrt{2}\cdot N_1}{2\cdot(N_1-1)\cdot(N_2-1)} = 0.26517$

$\frac{\sqrt{2}\cdot N_1}{2\cdot(N_1-1)\cdot(N_2-1)} - \frac{AH}{HK} = 0.00000$

$EH = 3.95105$

$GH = 1.38633$

$\frac{EH}{GH} = 2.85000$

$\frac{N_1\cdot N_2\cdot((2\cdot N_1\cdot N_2-2\cdot N_2-N_1)+2)}{(N_2-1)\cdot((((2\cdot N_1\cdot N_2-2\cdot N_2)+N_1^2)-2\cdot N_1)+2)} = 2.85000$

$\frac{N_1\cdot N_2\cdot((2\cdot N_1\cdot N_2-2\cdot N_2-N_1)+2)}{(N_2-1)\cdot((((2\cdot N_1\cdot N_2-2\cdot N_2)+N_1^2)-2\cdot N_1)+2)} - \frac{EH}{GH} = 0.00000$

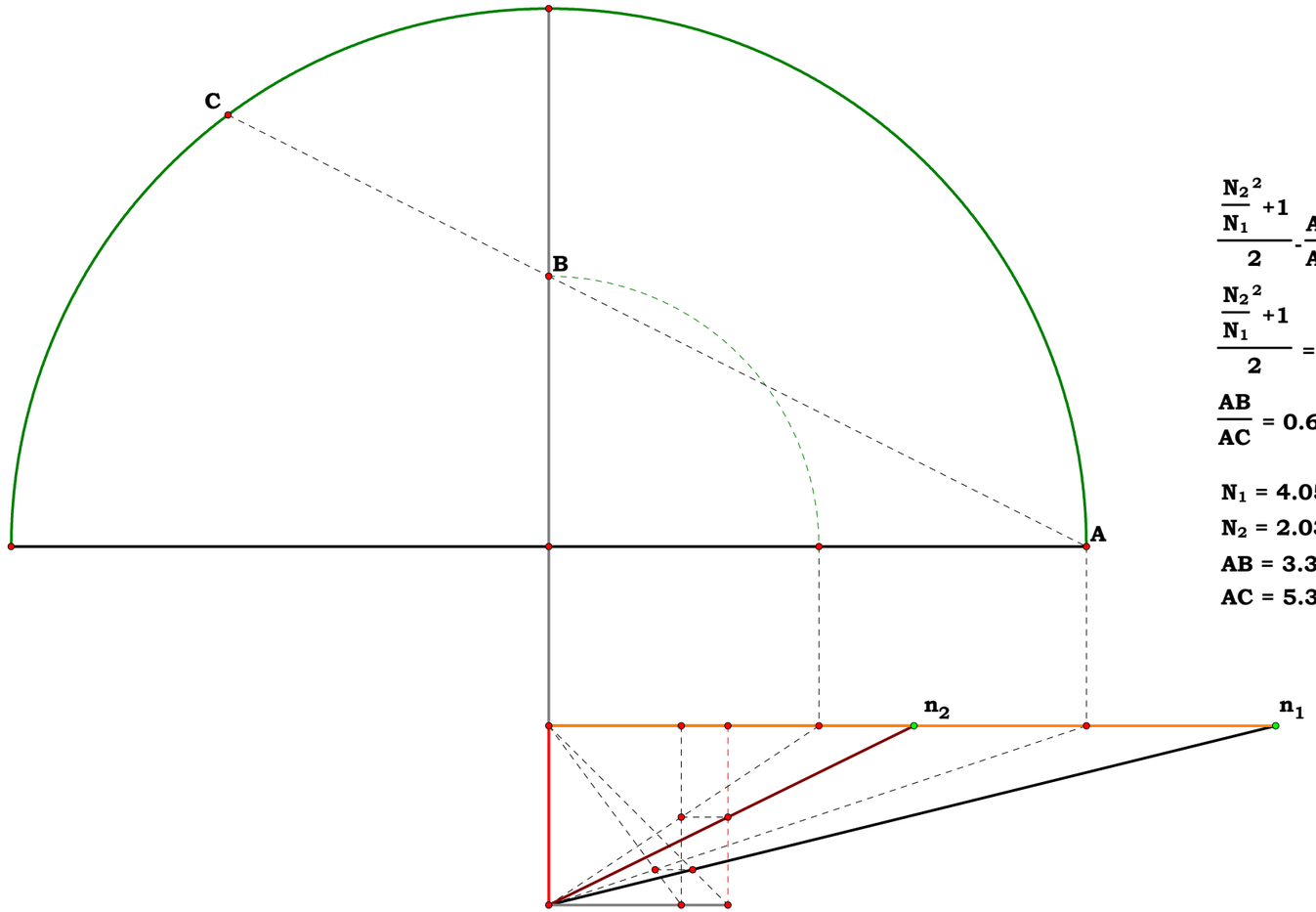
$N_1 = 3.00000$

$N_2 = 5.00000$

Points

$bd = 0.66667$

$bd\text{^}2 = 0.44444$



$$\frac{\frac{N_2^2}{N_1}+1}{2}-\frac{AB}{AC} = 0.00000$$

$$\frac{\frac{N_2^2}{N_1}+1}{2} = 0.62621$$

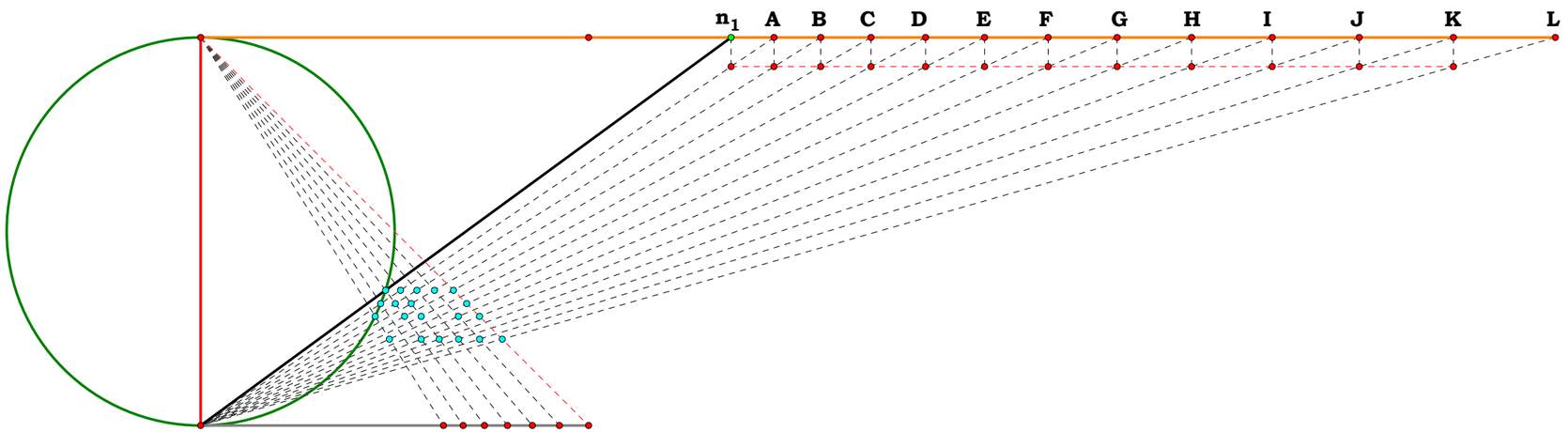
$$\frac{AB}{AC} = 0.62621$$

$N_1 = 4.05604$

$N_2 = 2.03783$

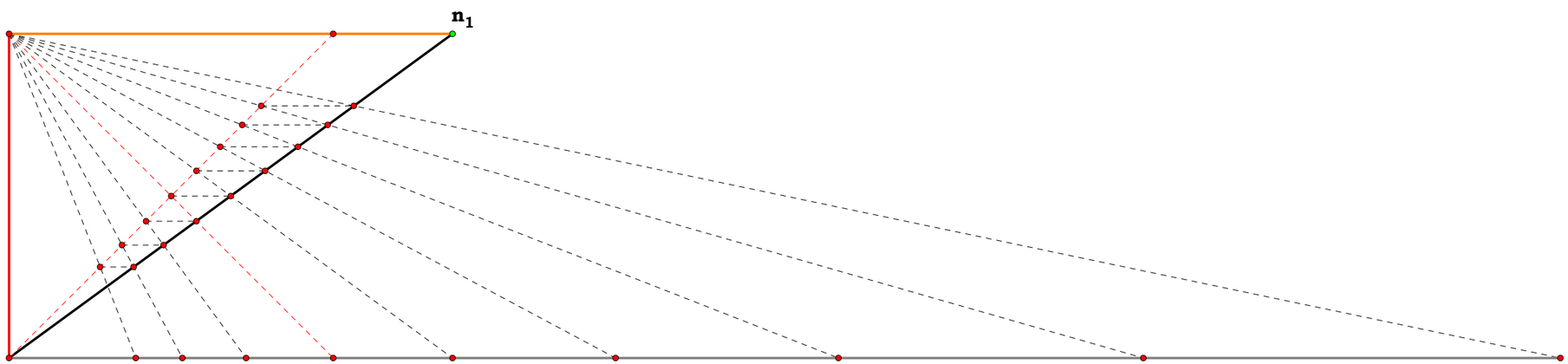
$AB = 3.35735$

$AC = 5.36137$



N_1 = 1.36693

A = 1.47803	E = 2.02036	I = 2.76169	$N_1^{1.25}$-A = 0.00000	$N_1^{2.25}$-E = 0.00000	$N_1^{3.25}$-I = 0.00000
B = 1.59816	F = 2.18457	J = 2.98615	$N_1^{1.5}$-B = 0.00000	$N_1^{2.5}$-F = 0.00000	$N_1^{3.5}$-J = 0.00000
C = 1.72805	G = 2.36212	K = 3.22885	$N_1^{1.75}$-C = 0.00000	$N_1^{2.75}$-G = 0.00000	$N_1^{3.75}$-K = 0.00000
D = 1.86850	H = 2.55410	L = 3.49128	N_1^{2}-D = 0.00000	N_1^{3}-H = 0.00000	N_1^{4}-L = 0.00000



$N_1 = 1.36763$

$A = 1.00000$
$B = 1.36763$
$C = 1.87042$
$D = 2.55805$

$E = 3.49847$
$F = 4.78462$
$G = 0.73119$
$H = 0.53464$
$I = 0.39092$

$N_1^0\text{-}A = 0.00000$
$N_1^1\text{-}B = 0.00000$
$N_1^2\text{-}C = 0.00000$
$N_1^3\text{-}D = 0.00000$

$N_1^4\text{-}E = 0.00000$
$N_1^5\text{-}F = 0.00000$
$N_1^{-1}\text{-}G = 0.00000$
$N_1^{-2}\text{-}H = 0.00000$
$N_1^{-3}\text{-}I = 0.00000$

$N_1 = 2.10483$

$N_2 = 2.59960$

$x_A = 2.10483$

$x_B = 2.59960$

$x_C = 3.21068$

$x_D = 3.96539$

$x_E = 4.89752$

$x_F = 1.70423$

$x_G = 1.37987$

$x_H = 1.11724$

$x_I = 0.90460$

$\frac{N_2^0}{N_1^{-1}} = 2.10483$

$\frac{N_2^1}{N_1^0} = 2.59960$

$\frac{N_2^2}{N_1^1} = 3.21068$

$\frac{N_2^3}{N_1^2} = 3.96539$

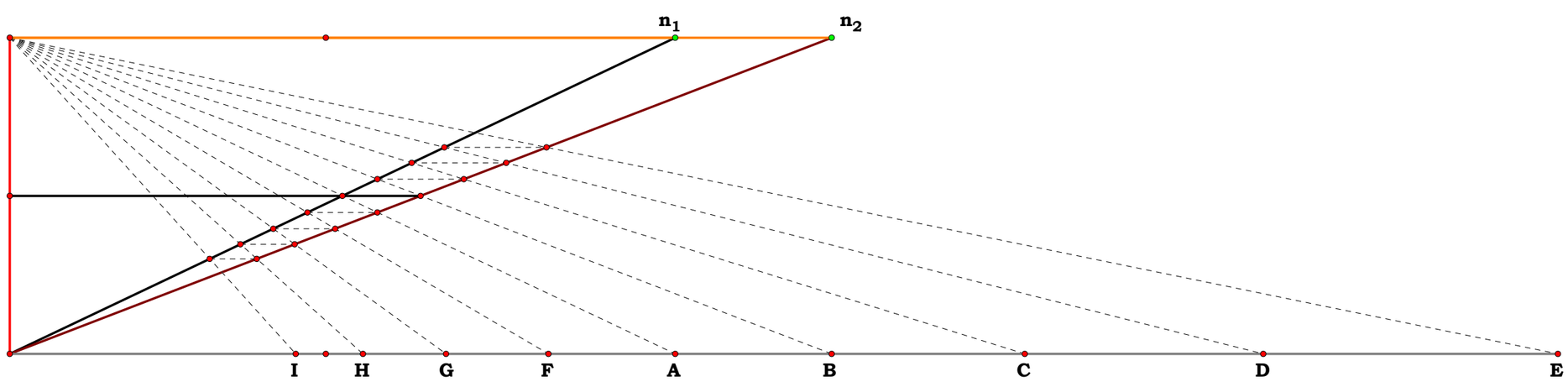
$\frac{N_2^4}{N_1^3} = 4.89752$

$\frac{N_2^{-1}}{N_1^{-2}} = 1.70423$

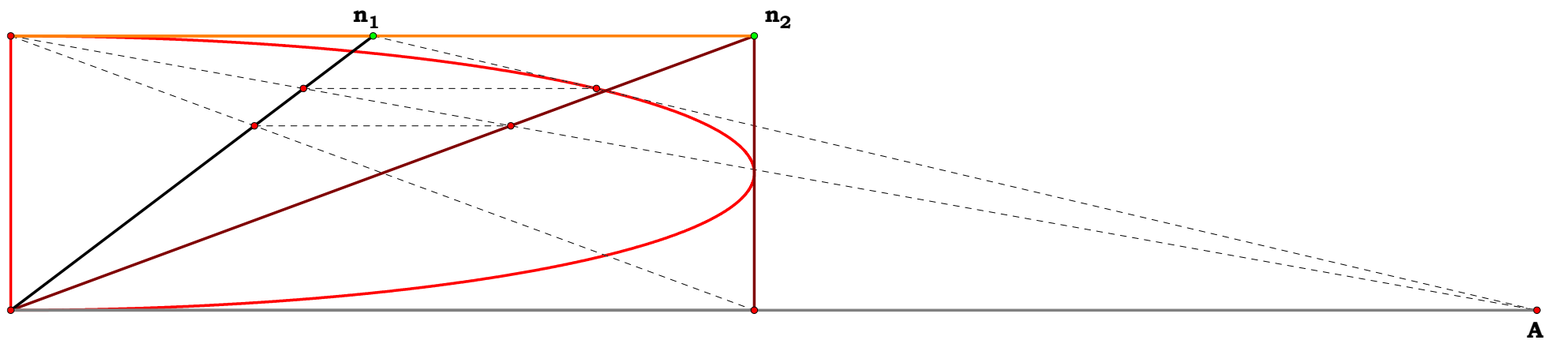
$\frac{N_2^{-2}}{N_1^{-3}} = 1.37987$

$\frac{N_2^{-3}}{N_1^{-4}} = 1.11724$

$\frac{N_2^{-4}}{N_1^{-5}} = 0.90460$



From any point n_1 draw the tangent to the ellipse n_2. Or given the square n_2 divide it by n_1.



$N_1 = 1.32088$ $A = 5.56312$

$N_2 = 2.71076$ $\frac{N_2^2}{N_1} - A = 0.00000$

A^2-B = 0.00000
(A·B)-C = 0.00000
B^2-D = 0.00000
(B·C)-E = 0.00000

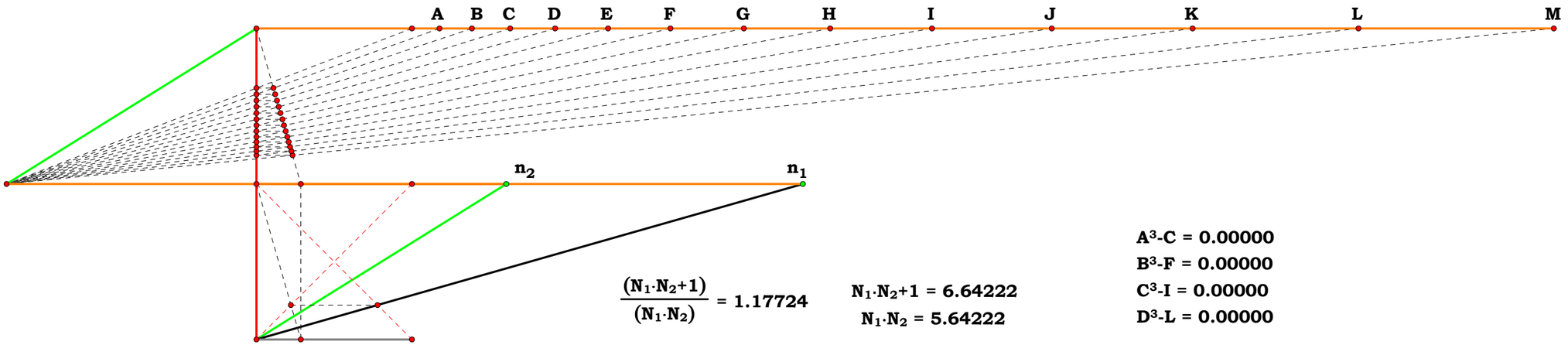
C^2-F = 0.00000
(C·D)-G = 0.00000
D^2-H = 0.00000
(D·E)-I = 0.00000

E^2-J = 0.00000
(E·F)-K = 0.00000
F^2-L = 0.00000
(F·G)-M = 0.00000

$\frac{N_1 \cdot N_2 + 1}{N_1 \cdot N_2}^{1}$ -A = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{2}$ -B = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{3}$ -C = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{4}$ -D = 0.00000

$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{5}$ -E = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{6}$ -F = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{7}$ -G = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{8}$ -H = 0.00000

$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{9}$ -I = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{10}$ -J = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{11}$ -K = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{12}$ -L = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{13}$ -M = 0.00000



$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}$ = 1.17724

$N_1 \cdot N_2 + 1$ = 6.64222
$N_1 \cdot N_2$ = 5.64222

A^3-C = 0.00000
B^3-F = 0.00000
C^3-I = 0.00000
D^3-L = 0.00000

N_1 = 3.51340
N_2 = 1.60591

A = 1.17724
B = 1.38588
C = 1.63151
D = 1.92067
E = 2.26108

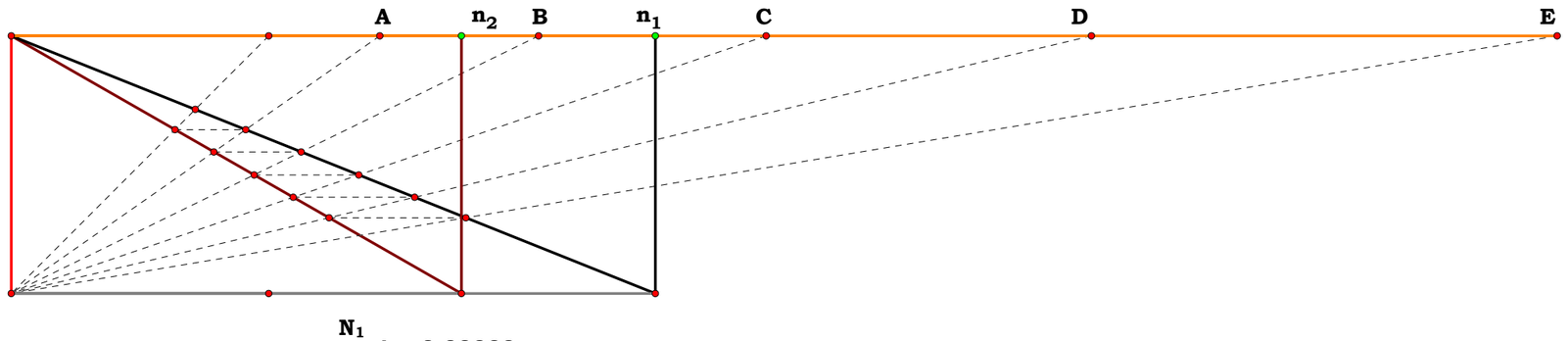
F = 2.66183
G = 3.13360
H = 3.68898
I = 4.34280

J = 5.11249
K = 6.01861
L = 7.08532
M = 8.34108

A^2 = 1.38588
A·B = 1.63151
B^2 = 1.92067
B·C = 2.26108

C^2 = 2.66183
C·D = 3.13360
D^2 = 3.68898
D·E = 4.34280

E^2 = 5.11249
E·F = 6.01861
F^2 = 7.08532
F·G = 8.34108



A = 1.43109

B = 2.04801

C = 2.93088

D = 4.19435

E = 6.00248

$$\frac{N_1}{N_2} - A = 0.00000$$

$$\frac{N_1^{\,2}}{N_2} - B = 0.00000$$

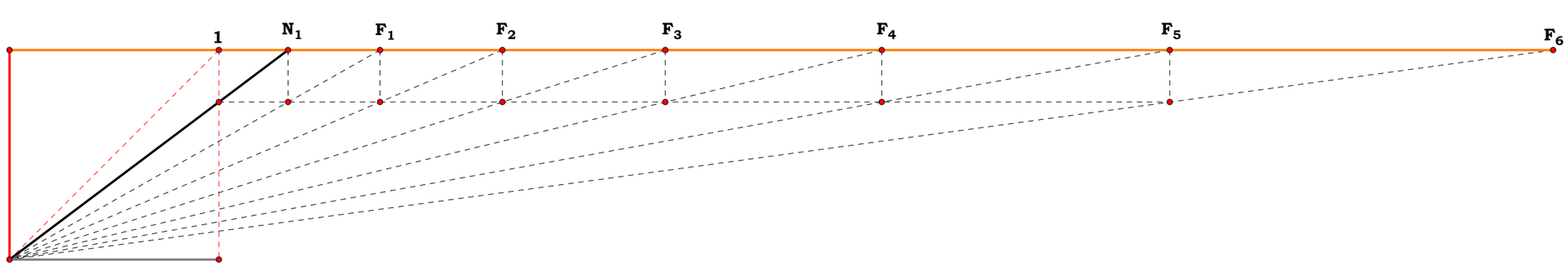
$$\frac{N_1^{\,3}}{N_2} - C = 0.00000$$

$$\frac{N_1^{\,4}}{N_2} - D = 0.00000$$

$$\frac{N_1^{\,5}}{N_2} - E = 0.00000$$

$N_1 = 1.33026$

$F_1 = 1.76959$	$N_1^2 - F_1 = 0.00000$
$F_2 = 2.35402$	$N_1^3 - F_2 = 0.00000$
$F_3 = 3.13146$	$N_1^4 - F_3 = 0.00000$
$F_4 = 4.16565$	$N_1^5 - F_4 = 0.00000$
$F_5 = 5.54140$	$N_1^6 - F_5 = 0.00000$
$F_6 = 7.37150$	$N_1^7 - F_6 = 0.00000$



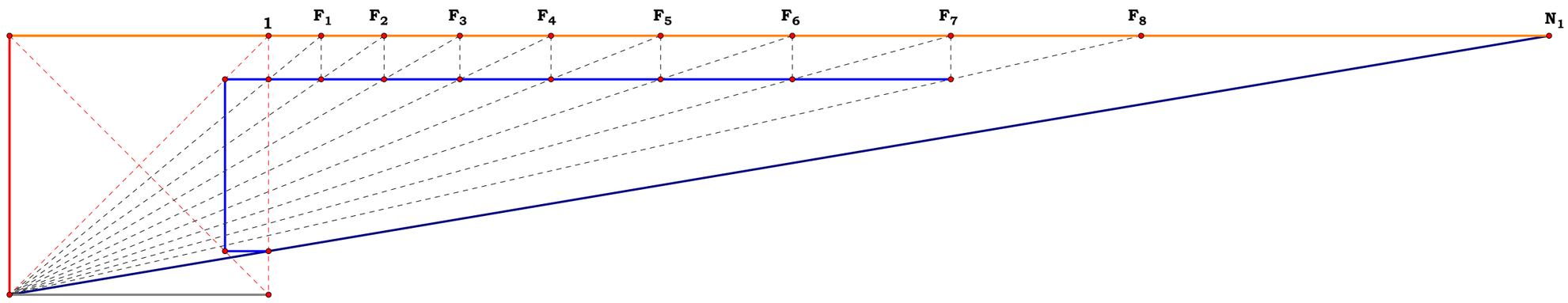
$N_1 = 5.94204$

$\frac{N_1}{N_1-1} = 1.20235$

$F_1 = 1.20235$
$F_2 = 1.44564$
$F_3 = 1.73815$
$F_4 = 2.08986$
$F_5 = 2.51273$
$F_6 = 3.02118$
$F_7 = 3.63250$
$F_8 = 4.36752$

$\frac{N_1}{N_1-1} - F_1 = 0.00000$
$\frac{N_1}{N_1-1}^{2} - F_2 = 0.00000$
$\frac{N_1}{N_1-1}^{3} - F_3 = 0.00000$
$\frac{N_1}{N_1-1}^{4} - F_4 = 0.00000$

$\frac{N_1}{N_1-1}^{5} - F_5 = 0.00000$
$\frac{N_1}{N_1-1}^{6} - F_6 = 0.00000$
$\frac{N_1}{N_1-1}^{7} - F_7 = 0.00000$
$\frac{N_1}{N_1-1}^{8} - F_8 = 0.00000$



$F_1 = 0.48068$ $\quad N_1\cdot(N_1+1)-F_1 = 0.00000$

$F_2 = 0.65122$ $\quad N_1\cdot(N_1+1)^2-F_2 = 0.00000$

$F_3 = 0.88227$ $\quad N_1\cdot(N_1+1)^3-F_3 = 0.00000$

$F_4 = 1.19530$ $\quad N_1\cdot(N_1+1)^4-F_4 = 0.00000$

$F_5 = 1.61939$ $\quad N_1\cdot(N_1+1)^5-F_5 = 0.00000$

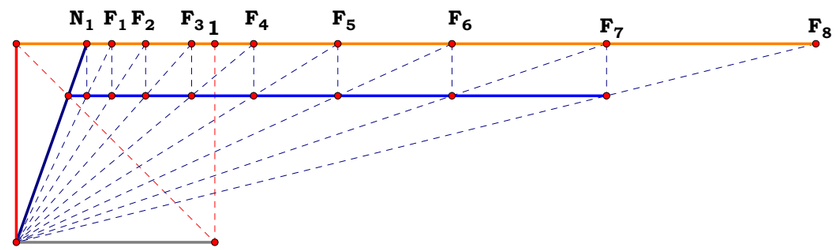
$F_6 = 2.19395$ $\quad N_1\cdot(N_1+1)^6-F_6 = 0.00000$

$F_7 = 2.97235$ $\quad N_1\cdot(N_1+1)^7-F_7 = 0.00000$

$F_8 = 4.02694$ $\quad N_1\cdot(N_1+1)^8-F_8 = 0.00000$

$N_1 = 0.35480$

$N_1+1 = 1.35480$

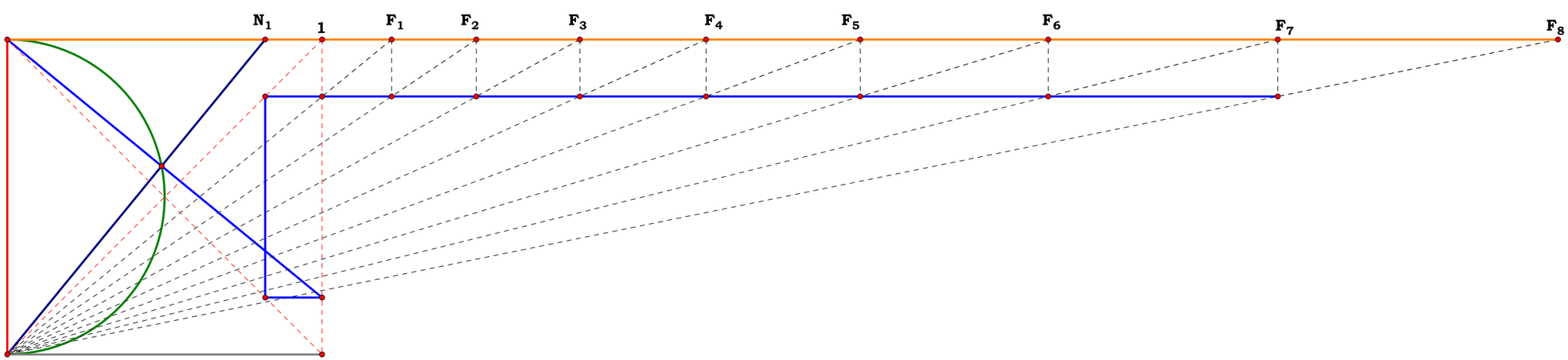


$N_1 = 0.81930$

$\frac{1}{N_1} = 1.22055$

$F_1 = 1.22055$
$F_2 = 1.48974$
$F_3 = 1.81830$
$F_4 = 2.21933$
$F_5 = 2.70881$
$F_6 = 3.30623$
$F_7 = 4.03542$
$F_8 = 4.92544$

$\frac{1}{N_1} - F_1 = 0.00000$
$\frac{1}{N_1}^2 - F_2 = 0.00000$
$\frac{1}{N_1}^3 - F_3 = 0.00000$
$\frac{1}{N_1}^4 - F_4 = 0.00000$
$\frac{1}{N_1}^5 - F_5 = 0.00000$
$\frac{1}{N_1}^6 - F_6 = 0.00000$
$\frac{1}{N_1}^7 - F_7 = 0.00000$
$\frac{1}{N_1}^8 - F_8 = 0.00000$



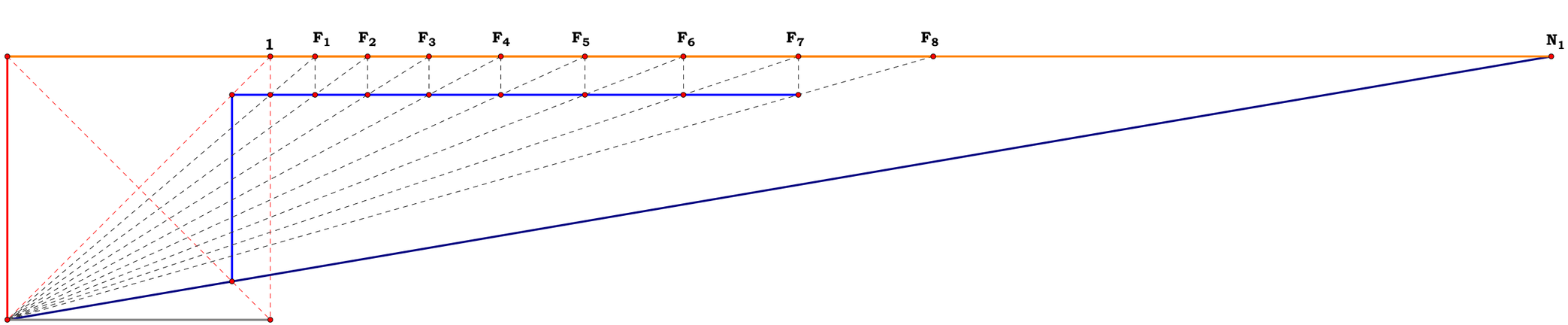
$N_1 = 5.86974$

$\frac{N_1+1}{N_1} = 1.17037$

$F_1 = 1.17037$
$F_2 = 1.36975$
$F_3 = 1.60311$
$F_4 = 1.87623$
$F_5 = 2.19587$
$F_6 = 2.56997$
$F_7 = 3.00781$
$F_8 = 3.52023$

$\frac{N_1+1}{N_1} - F_1 = 0.00000$
$\frac{N_1+1^{\,2}}{N_1} - F_2 = 0.00000$
$\frac{N_1+1^{\,3}}{N_1} - F_3 = 0.00000$
$\frac{N_1+1^{\,4}}{N_1} - F_4 = 0.00000$

$\frac{N_1+1^{\,5}}{N_1} - F_5 = 0.00000$
$\frac{N_1+1^{\,6}}{N_1} - F_6 = 0.00000$
$\frac{N_1+1^{\,7}}{N_1} - F_7 = 0.00000$
$\frac{N_1+1^{\,8}}{N_1} - F_8 = 0.00000$



$N_1 = 1.67971$

$\frac{1}{N_1} = 0.59534$

$\frac{N_1^2+1}{N_1^2} = 1.35443$

$F_1 = 0.59534$
$F_2 = 0.80634$
$F_3 = 1.09214$
$F_4 = 1.47922$
$F_5 = 2.00350$
$F_6 = 2.71360$
$F_7 = 3.67537$
$F_8 = 4.97803$

$\frac{1}{N_1} \cdot \frac{N_1^2+1^{\,0}}{N_1^2} - F_1 = 0.00000$

$\frac{1}{N_1} \cdot \frac{N_1^2+1^{\,1}}{N_1^2} - F_2 = 0.00000$

$\frac{1}{N_1} \cdot \frac{N_1^2+1^{\,2}}{N_1^2} - F_3 = 0.00000$

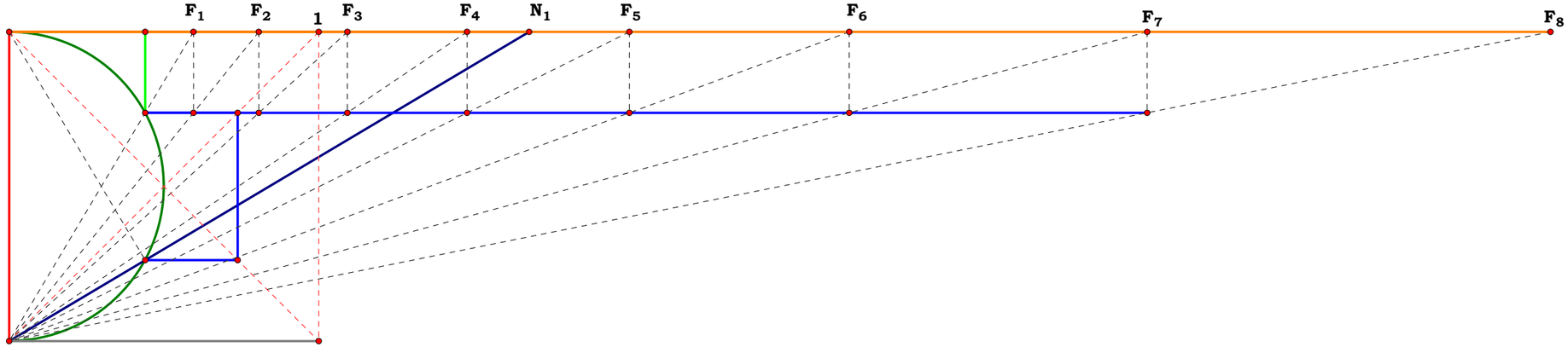
$\frac{1}{N_1} \cdot \frac{N_1^2+1^{\,3}}{N_1^2} - F_4 = 0.00000$

$\frac{1}{N_1} \cdot \frac{N_1^2+1^{\,4}}{N_1^2} - F_5 = 0.00000$

$\frac{1}{N_1} \cdot \frac{N_1^2+1^{\,5}}{N_1^2} - F_6 = 0.00000$

$\frac{1}{N_1} \cdot \frac{N_1^2+1^{\,6}}{N_1^2} - F_7 = 0.00000$

$\frac{1}{N_1} \cdot \frac{N_1^2+1^{\,7}}{N_1^2} - F_8 = 0.00000$

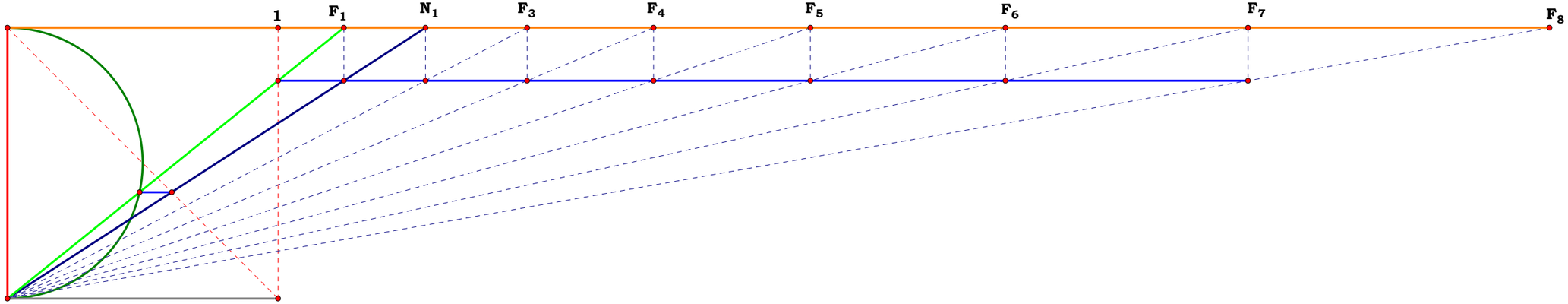


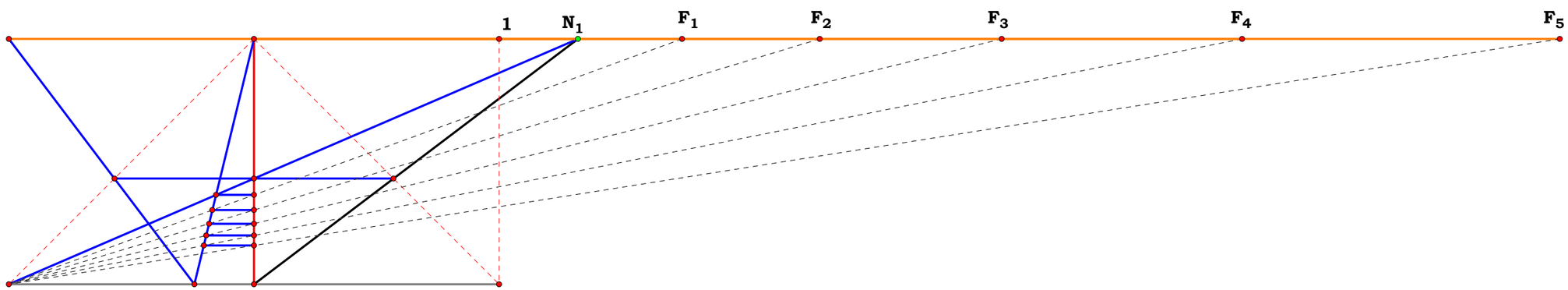
$N_1 = 1.54499$

$\sqrt{N_1} = 1.24298$

$F_1 = 1.24298$
$F_2 = 1.54499$
$F_3 = 1.92039$
$F_4 = 2.38700$
$F_5 = 2.96698$
$F_6 = 3.68789$
$F_7 = 4.58397$
$F_8 = 5.69776$

$\sqrt{N_1}-F_1 = 0.00000$
$\sqrt{N_1}^2-F_2 = 0.00000$
$\sqrt{N_1}^3-F_3 = 0.00000$
$\sqrt{N_1}^4-F_4 = 0.00000$
$\sqrt{N_1}^5-F_5 = 0.00000$
$\sqrt{N_1}^6-F_6 = 0.00000$
$\sqrt{N_1}^7-F_7 = 0.00000$
$\sqrt{N_1}^8-F_8 = 0.00000$





N_1 = 1.32152

F_1 = 1.74642	$N_1^2-F_1$ = 0.00000
F_2 = 2.30793	$N_1^3-F_2$ = 0.00000
F_3 = 3.04998	$N_1^4-F_3$ = 0.00000
F_4 = 4.03062	$N_1^5-F_4$ = 0.00000
F_5 = 5.32655	$N_1^6-F_5$ = 0.00000

$N_1 = 2.00000$

$\frac{N_1^2+1}{N_1^2} = 1.25000$

$F_1 = 1.25000$

$F_2 = 1.56250$

$F_3 = 1.95313$

$F_4 = 2.44141$

$F_5 = 3.05176$

$F_6 = 3.81470$

$F_7 = 4.76837$

$F_8 = 5.96046$

$\frac{N_1^2+1}{N_1^2} - F_1 = 0.00000$

$\frac{N_1^2+1}{N_1^2}^2 - F_2 = 0.00000$

$\frac{N_1^2+1}{N_1^2}^3 - F_3 = 0.00000$

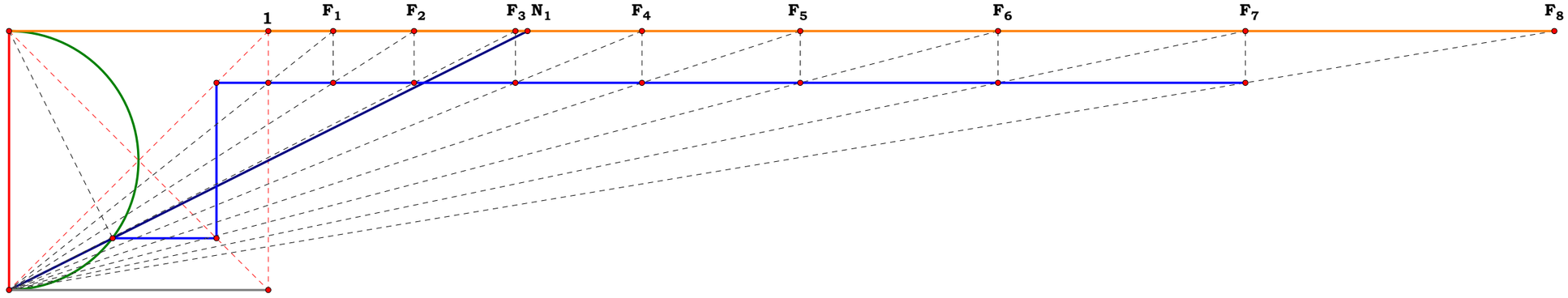
$\frac{N_1^2+1}{N_1^2}^4 - F_4 = 0.00000$

$\frac{N_1^2+1}{N_1^2}^5 - F_5 = 0.00000$

$\frac{N_1^2+1}{N_1^2}^6 - F_6 = 0.00000$

$\frac{N_1^2+1}{N_1^2}^7 - F_7 = 0.00000$

$\frac{N_1^2+1}{N_1^2}^8 - F_8 = 0.00000$



$N_1 = 1.34536$

$\frac{N_1^2+1}{N_1} = 2.08865$

$F_1 = 2.08865$

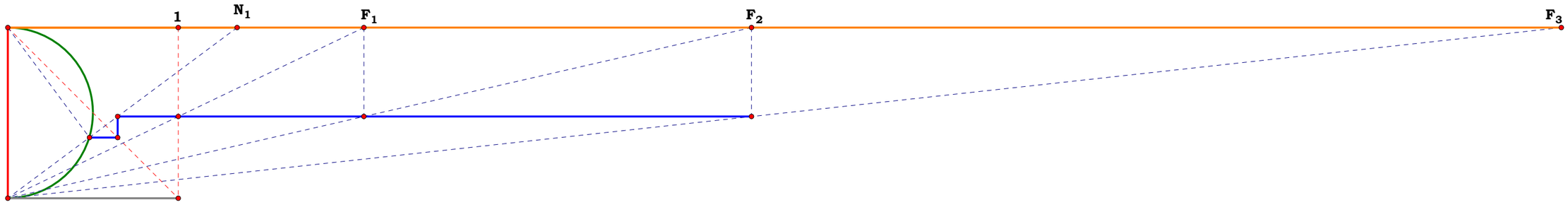
$F_2 = 4.36248$

$F_3 = 9.11171$

$\frac{N_1^2+1}{N_1} - F_1 = 0.00000$

$\frac{N_1^2+1}{N_1}^2 - F_2 = 0.00000$

$\frac{N_1^2+1}{N_1}^3 - F_3 = 0.00000$



$N_1 = 1.64904$

$\frac{1}{\sqrt{N_1-1}} = 1.24126$

$F_1 = 1.24126$

$F_2 = 1.54073$

$F_3 = 1.91245$

$F_4 = 2.37385$

$F_5 = 2.94657$

$F_6 = 3.65746$

$F_7 = 4.53987$

$\frac{1}{\sqrt{N_1-1}} - F_1 = 0.00000$

$\frac{1}{\sqrt{N_1-1}}^2 - F_2 = 0.00000$

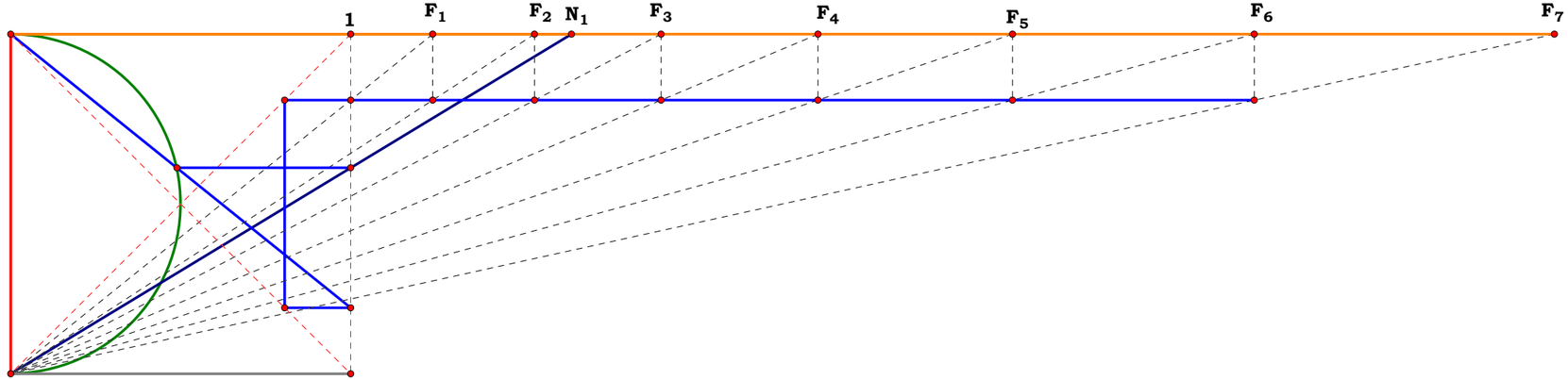
$\frac{1}{\sqrt{N_1-1}}^3 - F_3 = 0.00000$

$\frac{1}{\sqrt{N_1-1}}^4 - F_4 = 0.00000$

$\frac{1}{\sqrt{N_1-1}}^5 - F_5 = 0.00000$

$\frac{1}{\sqrt{N_1-1}}^6 - F_6 = 0.00000$

$\frac{1}{\sqrt{N_1-1}}^7 - F_7 = 0.00000$



$N_1 = 0.42634$

$N_1^2+1 = 1.18176$

$F_1 = 1.18176$ $(N_1^2+1)-F_1 = 0.00000$

$F_2 = 1.39656$ $(N_1^2+1)^2-F_2 = 0.00000$

$F_3 = 1.65041$ $(N_1^2+1)^3-F_3 = 0.00000$

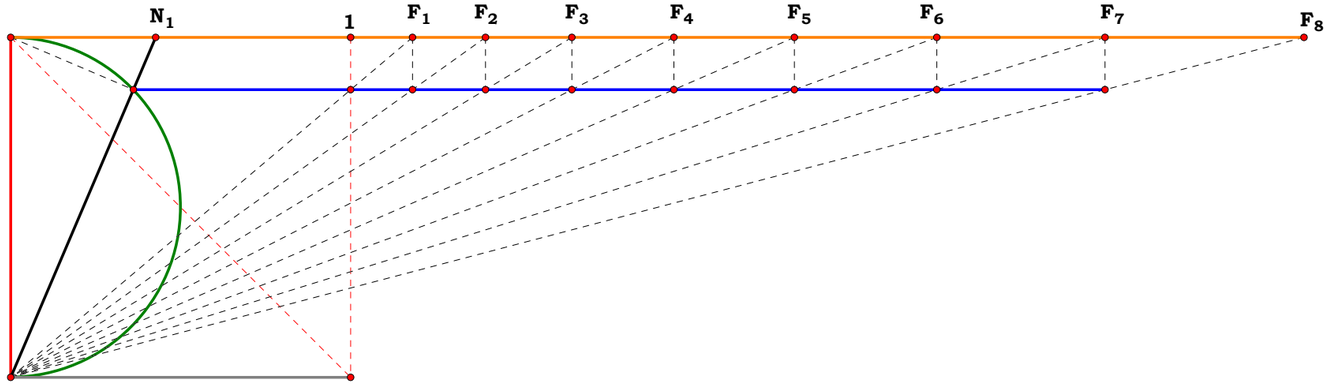
$F_4 = 1.95039$ $(N_1^2+1)^4-F_4 = 0.00000$

$F_5 = 2.30490$ $(N_1^2+1)^5-F_5 = 0.00000$

$F_6 = 2.72385$ $(N_1^2+1)^6-F_6 = 0.00000$

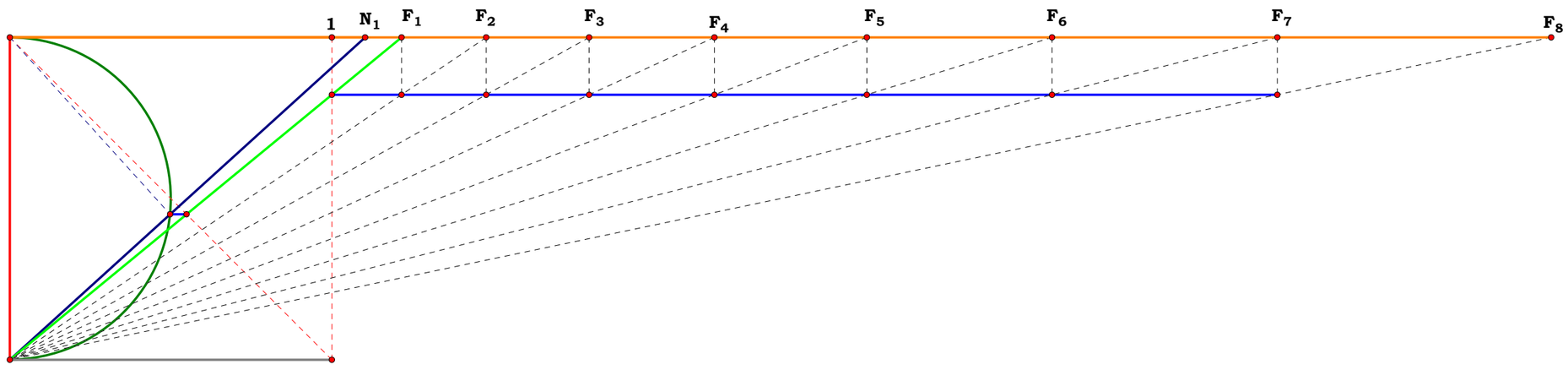
$F_7 = 3.21895$ $(N_1^2+1)^7-F_7 = 0.00000$

$F_8 = 3.80404$ $(N_1^2+1)^8-F_8 = 0.00000$



$N_1 = 1.10280$

$F_1 = 1.21617$	$N_1^2-F_1 = 0.00000$
$F_2 = 1.47906$	$N_1^4-F_2 = 0.00000$
$F_3 = 1.79878$	$N_1^6-F_3 = 0.00000$
$F_4 = 2.18762$	$N_1^8-F_4 = 0.00000$
$F_5 = 2.66051$	$N_1^{10}-F_5 = 0.00000$
$F_6 = 3.23562$	$N_1^{12}-F_6 = 0.00000$
$F_7 = 3.93505$	$N_1^{14}-F_7 = 0.00000$
$F_8 = 4.78567$	$N_1^{16}-F_8 = 0.00000$



$N_1 = 1.39071$

$F_1 = 2.02726$

$F_2 = 4.10977$

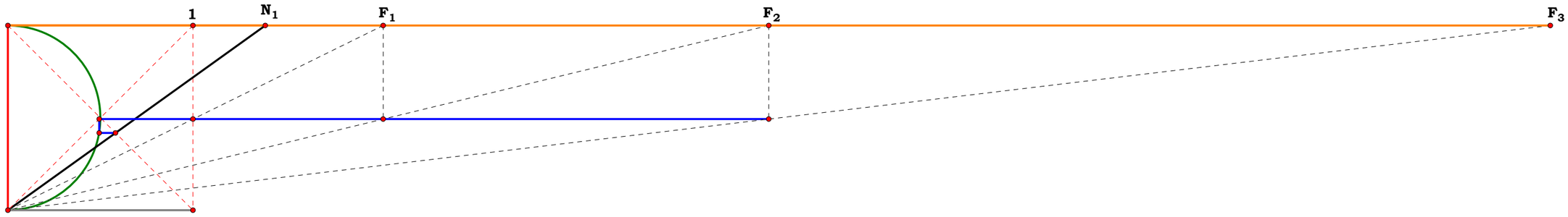
$F_3 = 8.33156$

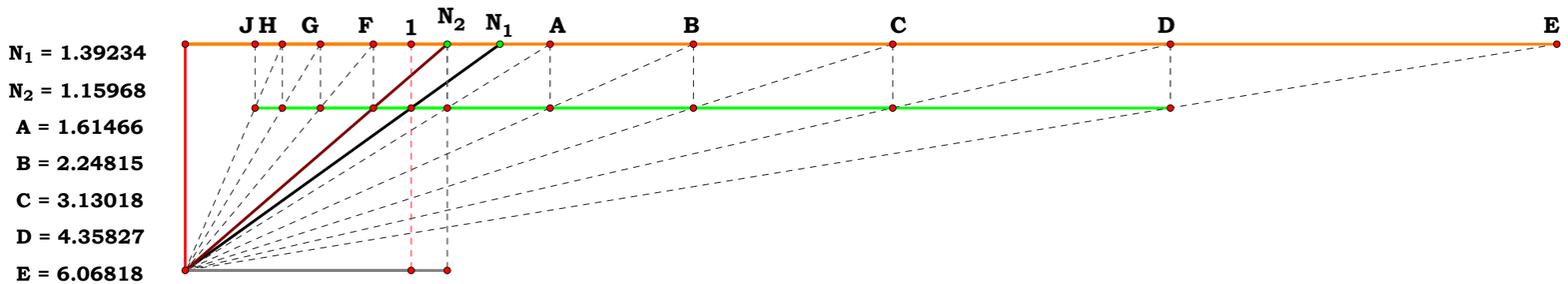
$\frac{N_1+1}{\sqrt{N_1}} = 2.02726$

$\frac{N_1+1}{\sqrt{N_1}} - F_1 = 0.00000$

$\frac{N_1+1}{\sqrt{N_1}}^2 - F_2 = 0.00000$

$\frac{N_1+1}{\sqrt{N_1}}^3 - F_3 = 0.00000$





N_1 = 1.39234

N_2 = 1.15968

A = 1.61466

B = 2.24815

C = 3.13018

D = 4.35827

E = 6.06818

F = 0.83290

G = 0.59820

H = 0.42964

J = 0.30857

$N_2 \cdot N_1^{1}$-A = 0.00000

$N_2 \cdot N_1^{2}$-B = 0.00000

$N_2 \cdot N_1^{3}$-C = 0.00000

$N_2 \cdot N_1^{4}$-D = 0.00000

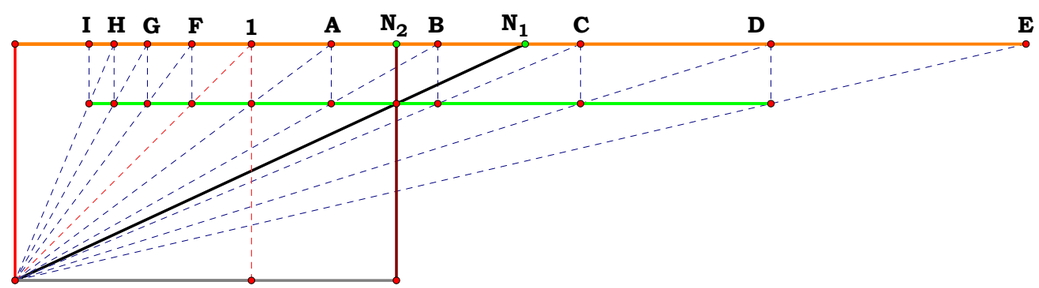
$N_2 \cdot N_1^{5}$-E = 0.00000

$N_2 \cdot N_1^{-1}$-F = 0.00000

$N_2 \cdot N_1^{-2}$-G = 0.00000

$N_2 \cdot N_1^{-3}$-H = 0.00000

$N_2 \cdot N_1^{-4}$-J = 0.00000



$N_1 = 2.15726$

$N_2 = 1.61326$

$\frac{N_1}{N_2} = 1.33720$

A = 1.33720

B = 1.78811

C = 2.39107

D = 3.19734

E = 4.27549

F = 0.74783

G = 0.55925

H = 0.41822

I = 0.31276

$\frac{N_1^{\,1}}{N_2}$ -A = 0.00000

$\frac{N_1^{\,2}}{N_2}$ -B = 0.00000

$\frac{N_1^{\,3}}{N_2}$ -C = 0.00000

$\frac{N_1^{\,4}}{N_2}$ -D = 0.00000

$\frac{N_1^{\,5}}{N_2}$ -E = 0.00000

$\frac{N_1^{\,-1}}{N_2}$ -F = 0.00000

$\frac{N_1^{\,-2}}{N_2}$ -G = 0.00000

$\frac{N_1^{\,-3}}{N_2}$ -H = 0.00000

$\frac{N_1^{\,-4}}{N_2}$ -I = 0.00000

Plate 3

$\frac{N_1}{N_2}$-A = 0.00000

$\frac{N_1^{\,2}}{N_2^{\,2}}$-B = 0.00000

$\frac{N_1^{\,3}}{N_2^{\,3}}$-C = 0.00000

$\frac{N_1^{\,4}}{N_2^{\,4}}$-D = 0.00000

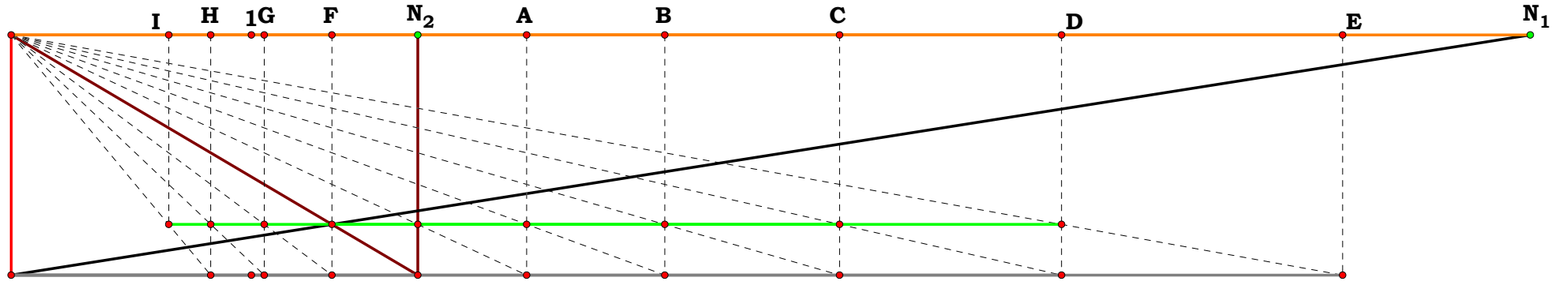
$\frac{N_1^{\,5}}{N_2^{\,5}}$-E = 0.00000

$\frac{N_2^{\,4}}{N_1^{\,4}}$-I = 0.00000

$\frac{N_2^{\,3}}{N_1^{\,3}}$-H = 0.00000

$\frac{N_2^{\,2}}{N_1^{\,2}}$-G = 0.00000

$\frac{N_2}{N_1}$-F = 0.00000



$N_1 = 6.32383$

$N_2 = 1.69284$

$A = 2.14600$

$B = 2.72047$

$C = 3.44872$

$D = 4.37192$

$E = 5.54225$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{1} - A = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{2} - B = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{3} - C = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{4} - D = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{5} - E = 0.00000$

$F = 1.33537$

$G = 1.05339$

$H = 0.83095$

$I = 0.65548$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{-1} - F = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{-2} - G = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{-3} - H = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{-4} - I = 0.00000$

$N_1 = 5.09097$

$N_2 = 1.14146$

$\frac{N_1}{N_1-1} = 1.24444$

$F_1 = 1.42048$

$F_2 = 1.76770$

$F_3 = 2.19980$

$F_4 = 2.73752$

$F_5 = 3.40668$

$F_6 = 4.23941$

$N_2 \cdot \frac{N_1}{N_1-1} - F_1 = 0.00000$

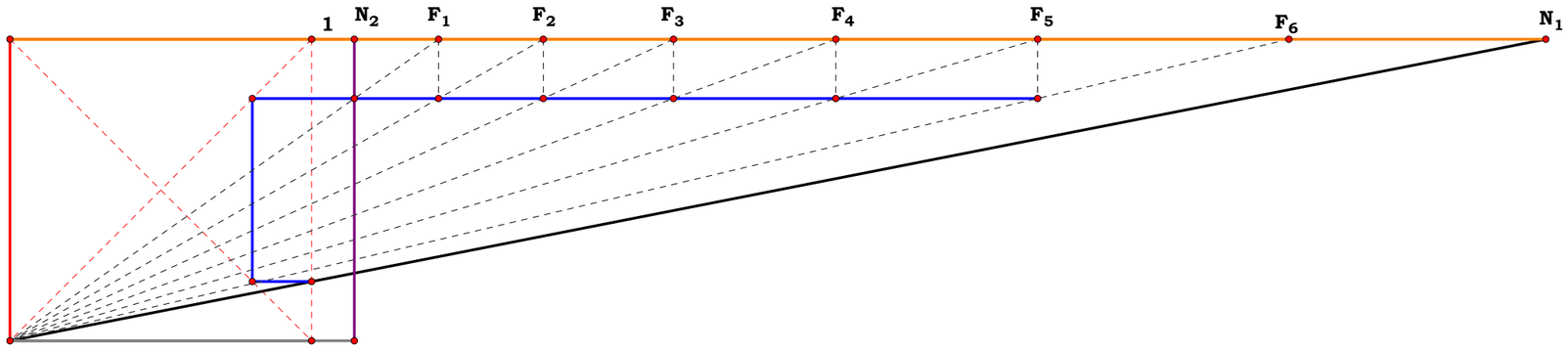
$N_2 \cdot \frac{N_1}{N_1-1}^{2} - F_2 = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{3} - F_3 = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{4} - F_4 = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{5} - F_5 = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{6} - F_6 = 0.00000$



$N_1 = 6.58126$

$N_2 = 1.32761$

$\frac{N_1}{N_1-N_2} = 1.25270$

$F_1 = 1.25270$

$F_2 = 1.56926$

$F_3 = 1.96582$

$F_4 = 2.46259$

$F_5 = 3.08489$

$F_6 = 3.86445$

$F_7 = 4.84100$

$F_8 = 6.06433$

$\frac{N_1}{N_1-N_2} - F_1 = 0.00000$

$\frac{N_1}{N_1-N_2}^{2} - F_2 = 0.00000$

$\frac{N_1}{N_1-N_2}^{3} - F_3 = 0.00000$

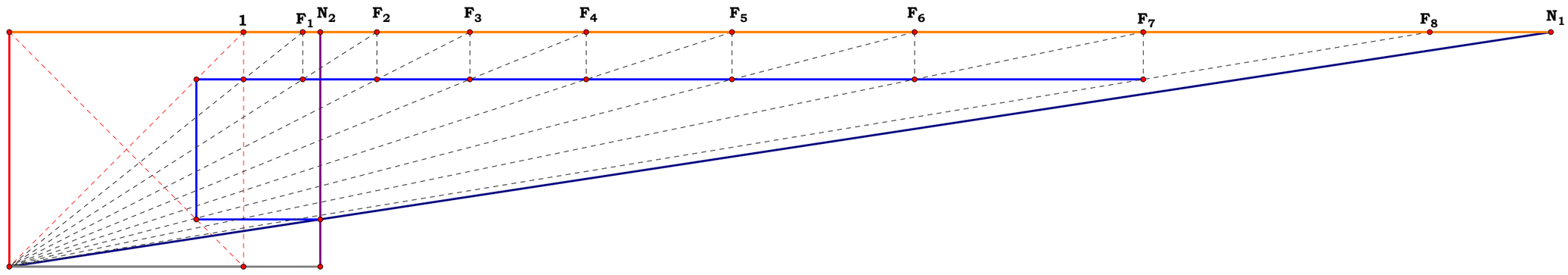
$\frac{N_1}{N_1-N_2}^{4} - F_4 = 0.00000$

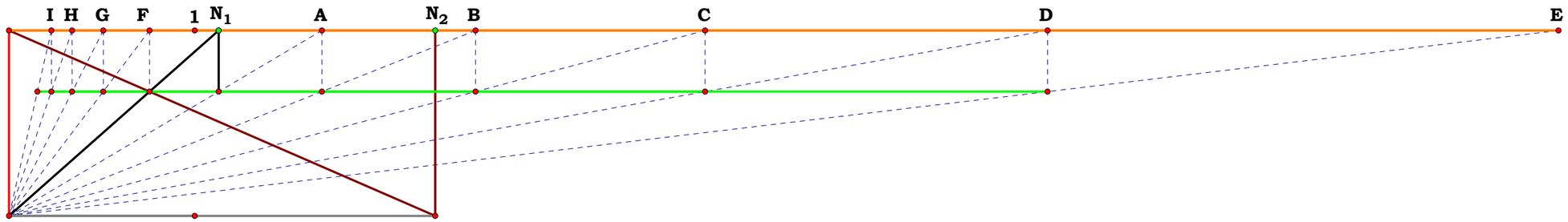
$\frac{N_1}{N_1-N_2}^{5} - F_5 = 0.00000$

$\frac{N_1}{N_1-N_2}^{6} - F_6 = 0.00000$

$\frac{N_1}{N_1-N_2}^{7} - F_7 = 0.00000$

$\frac{N_1}{N_1-N_2}^{8} - F_8 = 0.00000$





$N_1 = 1.12857$

$N_2 = 2.29441$

$A = 1.68369$

$B = 2.51186$

$C = 3.74738$

$D = 5.59064$

$E = 8.34056$

$F = 0.75648$

$G = 0.50706$

$H = 0.33988$

$I = 0.22782$

$$N_1 \cdot \frac{N_1+N_2}{N_2}^{1} - A = 0.00000$$

$$N_1 \cdot \frac{N_1+N_2}{N_2}^{2} - B = 0.00000$$

$$N_1 \cdot \frac{N_1+N_2}{N_2}^{3} - C = 0.00000$$

$$N_1 \cdot \frac{N_1+N_2}{N_2}^{4} - D = 0.00000$$

$$N_1 \cdot \frac{N_1+N_2}{N_2}^{5} - E = 0.00000$$

$$N_1 \cdot \frac{N_1+N_2}{N_2}^{-1} - F = 0.00000$$

$$N_1 \cdot \frac{N_1+N_2}{N_2}^{-2} - G = 0.00000$$

$$N_1 \cdot \frac{N_1+N_2}{N_2}^{-3} - H = 0.00000$$

$$N_1 \cdot \frac{N_1+N_2}{N_2}^{-4} - I = 0.00000$$

$N_1 = 1.25654$

$N_2 = 0.28024$

$\frac{N_1 \cdot N_2}{N_1 - 1} = 1.37265$

$F_1 = 1.37265$

$F_2 = 1.72479$

$F_3 = 2.16726$

$F_4 = 2.72324$

$F_5 = 3.42185$

$F_6 = 4.29968$

$F_7 = 5.40271$

$F_8 = 6.78870$

$F_9 = 8.53025$

$\frac{N_1 \cdot N_2}{N_1 - 1} - F_1 = 0.00000$

$N_1 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - F_2 = 0.00000$

$N_1^2 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - F_3 = 0.00000$

$N_1^3 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - F_4 = 0.00000$

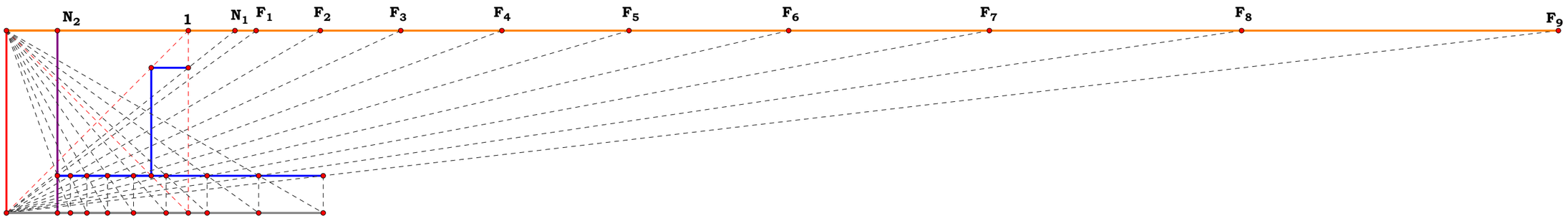
$N_1^4 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - F_5 = 0.00000$

$N_1^5 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - F_6 = 0.00000$

$N_1^6 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - F_7 = 0.00000$

$N_1^7 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - F_8 = 0.00000$

$N_1^8 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - F_9 = 0.00000$



$N_1 = 3.20361$

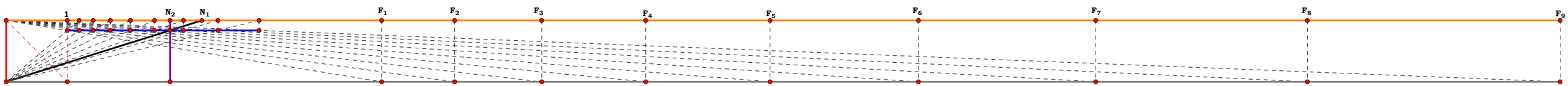
$N_2 = 2.68243$

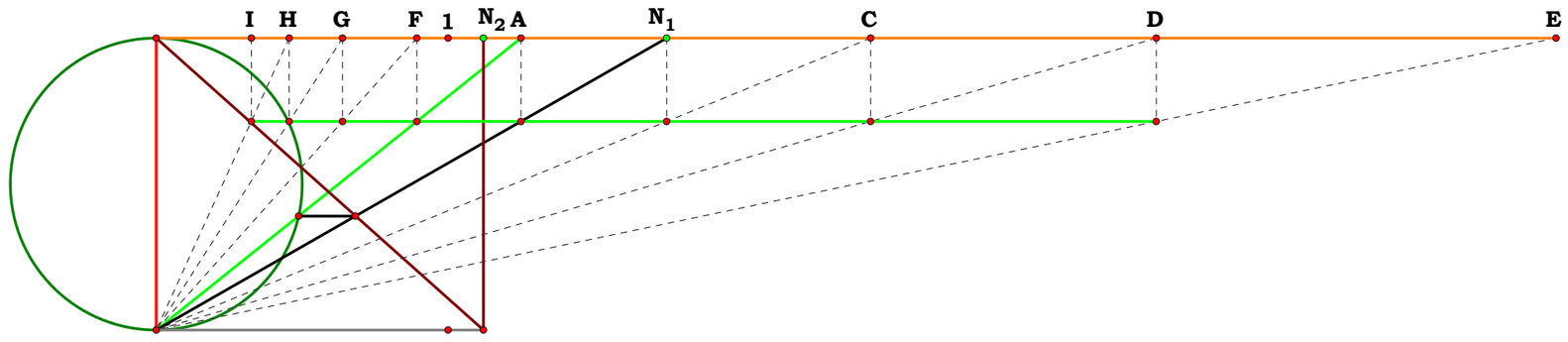
$\frac{N_1}{N_1-N_2} = 6.14677$

$\frac{N_1}{N_2} = 1.19430$

$F_1 = 6.14677$
$F_2 = 7.34107$
$F_3 = 8.76742$
$F_4 = 10.47089$
$F_5 = 12.50535$
$F_6 = 14.93509$
$F_7 = 17.83693$
$F_8 = 21.30258$
$F_9 = 25.44160$

$\frac{N_1^{0}}{N_2} \cdot \frac{N_1}{N_1-N_2} - F_1 = 0.00000$
$\frac{N_1}{N_2} \cdot \frac{N_1}{N_1-N_2} - F_2 = 0.00000$
$\frac{N_1^{2}}{N_2} \cdot \frac{N_1}{N_1-N_2} - F_3 = 0.00000$
$\frac{N_1^{3}}{N_2} \cdot \frac{N_1}{N_1-N_2} - F_4 = 0.00000$
$\frac{N_1^{4}}{N_2} \cdot \frac{N_1}{N_1-N_2} - F_5 = 0.00000$
$\frac{N_1^{5}}{N_2} \cdot \frac{N_1}{N_1-N_2} - F_6 = 0.00000$
$\frac{N_1^{6}}{N_2} \cdot \frac{N_1}{N_1-N_2} - F_7 = 0.00000$
$\frac{N_1^{7}}{N_2} \cdot \frac{N_1}{N_1-N_2} - F_8 = 0.00000$
$\frac{N_1^{8}}{N_2} \cdot \frac{N_1}{N_1-N_2} - F_9 = 0.00000$





$$\sqrt{\frac{N_1}{N_2}} = 1.24930$$

$$\sqrt{N_1 \cdot N_2} = 1.39967$$

$$N_2 = 1.12036$$

$A = 1.24930$

$N_1 = 1.74861$

$C = 2.44748$

$D = 3.42566$

$E = 4.79479$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{0} - A = 0.00000$$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{1} - N_1 = 0.00000$$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{2} - C = 0.00000$$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{3} - D = 0.00000$$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{4} - E = 0.00000$$

$F = 0.89257$

$G = 0.63770$

$H = 0.45561$

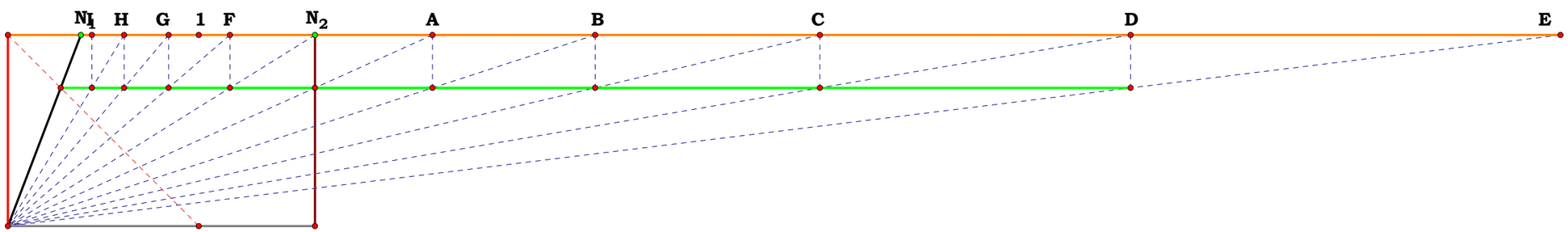
$I = 0.32551$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{-1} - F = 0.00000$$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{-2} - G = 0.00000$$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{-3} - H = 0.00000$$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{-4} - I = 0.00000$$



$N_1 = 0.38279$

$N_2 = 1.60857$

$A = 2.22432$

$B = 3.07576$

$C = 4.25313$

$D = 5.88118$

$E = 8.13244$

$F = 1.16328$

$G = 0.84126$

$H = 0.60838$

$I = 0.43996$

$N_2 \cdot (N_1+1)^{1} - A = 0.00000$

$N_2 \cdot (N_1+1)^{2} - B = 0.00000$

$N_2 \cdot (N_1+1)^{3} - C = 0.00000$

$N_2 \cdot (N_1+1)^{4} - D = 0.00000$

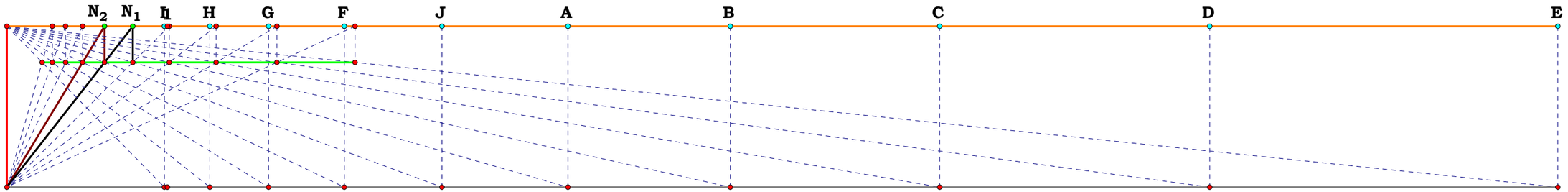
$N_2 \cdot (N_1+1)^{5} - E = 0.00000$

$N_2 \cdot (N_1+1)^{-1} - F = 0.00000$

$N_2 \cdot (N_1+1)^{-2} - G = 0.00000$

$N_2 \cdot (N_1+1)^{-3} - H = 0.00000$

$N_2 \cdot (N_1+1)^{-4} - I = 0.00000$



$N_1 = 0.78415$

$N_2 = 0.60814$

$\frac{N_1}{N_2} = 1.28943$

$\frac{N_1 \cdot N_2}{N_1 - N_2} = 2.70928$

J = 2.70928

A = 3.49343

B = 4.50454

C = 5.80830

D = 7.48941

E = 9.65708

F = 2.10114

G = 1.62951

H = 1.26374

I = 0.98008

$\frac{N_1^{\,0}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - J = 0.00000$

$\frac{N_1^{\,1}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - A = 0.00000$

$\frac{N_1^{\,2}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - B = 0.00000$

$\frac{N_1^{\,3}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - C = 0.00000$

$\frac{N_1^{\,4}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - D = 0.00000$

$\frac{N_1^{\,5}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - E = 0.00000$

$\frac{N_1^{\,-1}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - F = 0.00000$

$\frac{N_1^{\,-2}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - G = 0.00000$

$\frac{N_1^{\,-3}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - H = 0.00000$

$\frac{N_1^{\,-4}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2} - I = 0.00000$

$\frac{N_1 \cdot N_2}{N_1 - N_2} - J = 0.00000$

$\frac{N_1^{\,2}}{N_1 - N_2} - A = 0.00000$

$\frac{N_1^{\,3}}{N_1 \cdot N_2 - N_2^{\,2}} - B = 0.00000$

$\frac{N_1^{\,4}}{N_1 \cdot N_2^{\,2} - N_2^{\,3}} - C = 0.00000$

$\frac{N_1^{\,5}}{N_1 \cdot N_2^{\,3} - N_2^{\,4}} - D = 0.00000$

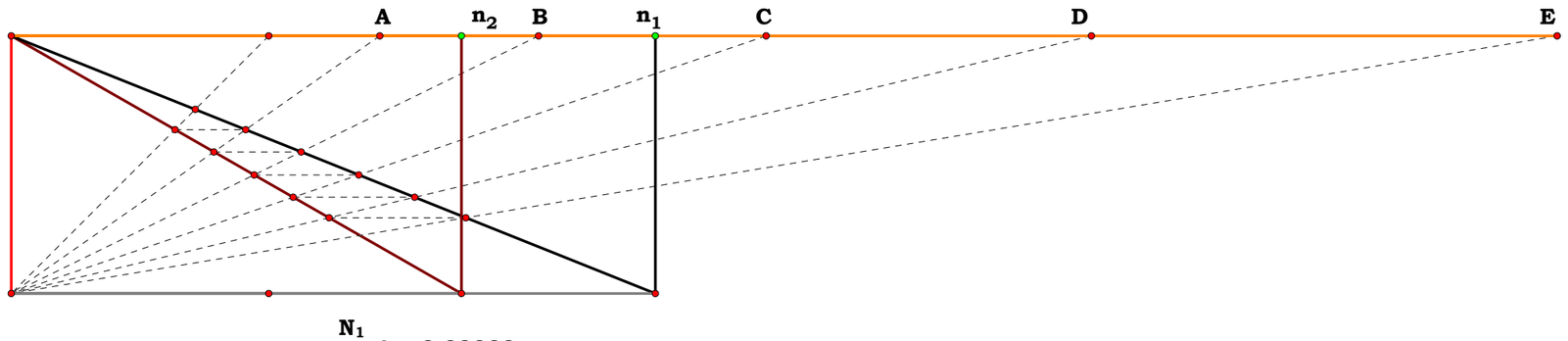
$\frac{N_1^{\,6}}{N_1 \cdot N_2^{\,4} - N_2^{\,5}} - E = 0.00000$

$\frac{N_2^{\,2}}{N_1 - N_2} - F = 0.00000$

$\frac{N_2^{\,3}}{N_1^{\,2} - N_1 \cdot N_2} - G = 0.00000$

$\frac{N_2^{\,4}}{N_1^{\,3} - N_1^{\,2} \cdot N_2} - H = 0.00000$

$\frac{N_2^{\,5}}{N_1^{\,4} - N_1^{\,3} \cdot N_2} - I = 0.00000$



A = 1.43109

B = 2.04801

C = 2.93088

D = 4.19435

E = 6.00248

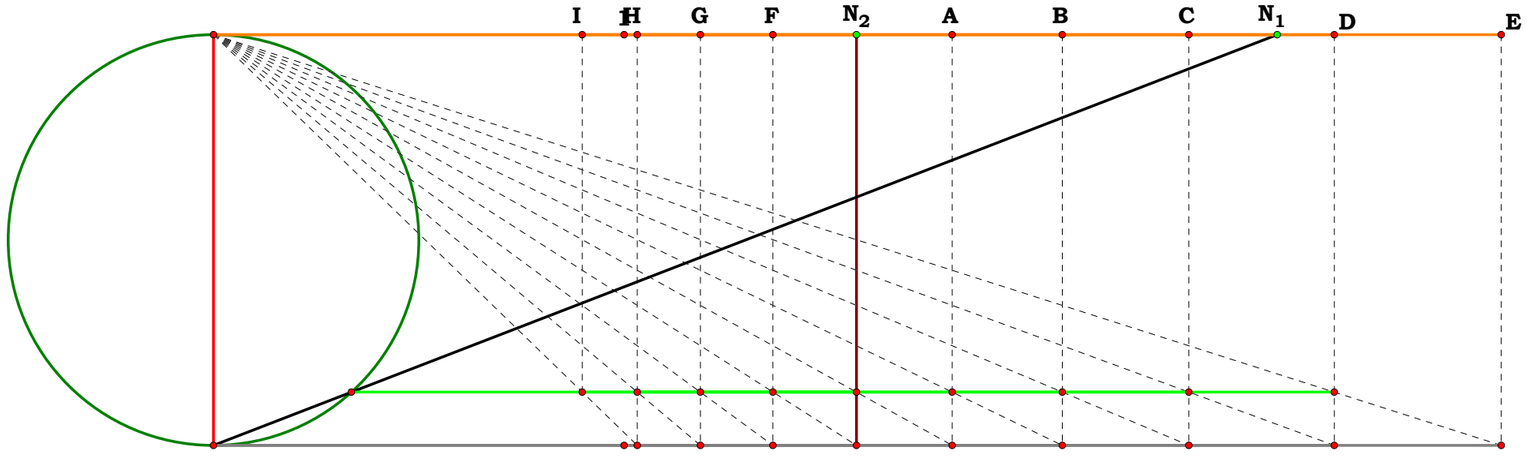
$$\frac{N_1}{N_2} - A = 0.00000$$

$$\frac{N_1^{\,2}}{N_2} - B = 0.00000$$

$$\frac{N_1^{\,3}}{N_2} - C = 0.00000$$

$$\frac{N_1^{\,4}}{N_2} - D = 0.00000$$

$$\frac{N_1^{\,5}}{N_2} - E = 0.00000$$



$$\frac{N_1^2+1}{N_1^2} = 1.14908$$

$$\frac{N_2\cdot(N_1^2+1)}{N_1^2} = 1.79864$$

$N_1 = 2.58997$

$N_2 = 1.56529$

A = 1.79864 $\quad \frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{0} - A = 0.00000$

B = 2.06677 $\quad \frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{1} - B = 0.00000$

C = 2.37488 $\quad \frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{2} - C = 0.00000$

D = 2.72892 $\quad \frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{3} - D = 0.00000$

E = 3.13573 $\quad \frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{4} - E = 0.00000$

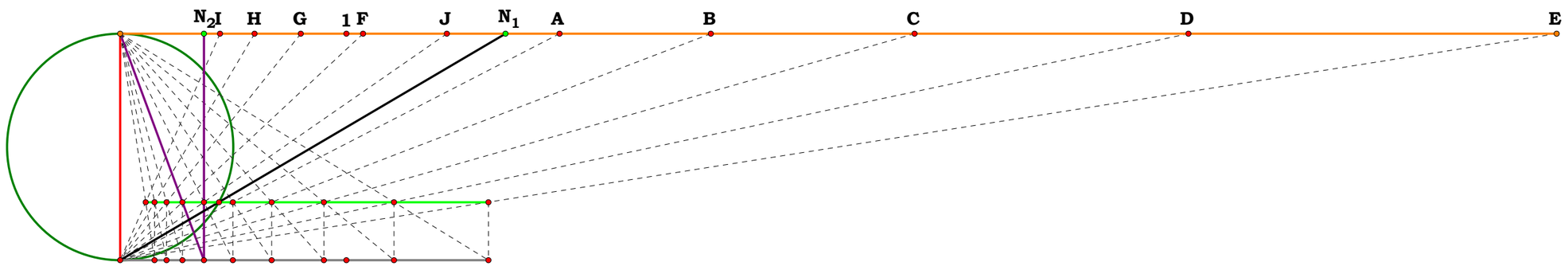
F = 1.36221 $\quad \frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{-2} - F = 0.00000$

G = 1.18549

H = 1.03169 $\quad \frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{-3} - G = 0.00000$

I = 0.89784 $\quad \frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{-4} - H = 0.00000$

$\frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{-5} - I = 0.00000$



$N_2 \cdot (N_1^2+1) = 1.44391$

$\frac{N_1^2+1}{N_1^2} = 1.34470$

$N_1 = 1.70325$

$N_2 = 0.37013$

$A = 1.94163$
$B = 2.61092$
$C = 3.51090$
$D = 4.72112$
$E = 6.34849$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,1}}{N_1^2} - A = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,2}}{N_1^2} - B = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,3}}{N_1^2} - C = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,4}}{N_1^2} - D = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,5}}{N_1^2} - E = 0.00000$

$J = 1.44391$
$F = 1.07378$
$G = 0.79853$
$H = 0.59383$
$I = 0.44161$

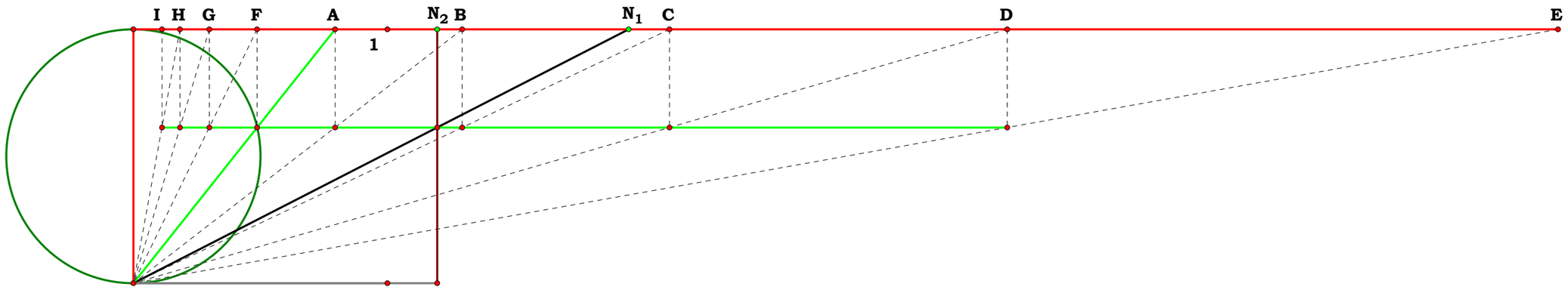
$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,0}}{N_1^2} - J = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,-1}}{N_1^2} - F = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,-2}}{N_1^2} - G = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,-3}}{N_1^2} - H = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,-4}}{N_1^2} - I = 0.00000$



$$\frac{N_1}{N_2} = 1.63024$$

$$\sqrt{\frac{N_1-N_2}{N_2}} = 0.79388$$

$N_1 = 1.94939$

$N_2 = 1.19577$

A = 0.79388 $\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1^{\,0}}{N_2}$ -A = 0.00000

B = 1.29421 $\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1^{\,1}}{N_2}$ -B = 0.00000

C = 2.10988 $\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1^{\,2}}{N_2}$ -C = 0.00000

D = 3.43962 $\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1^{\,3}}{N_2}$ -D = 0.00000

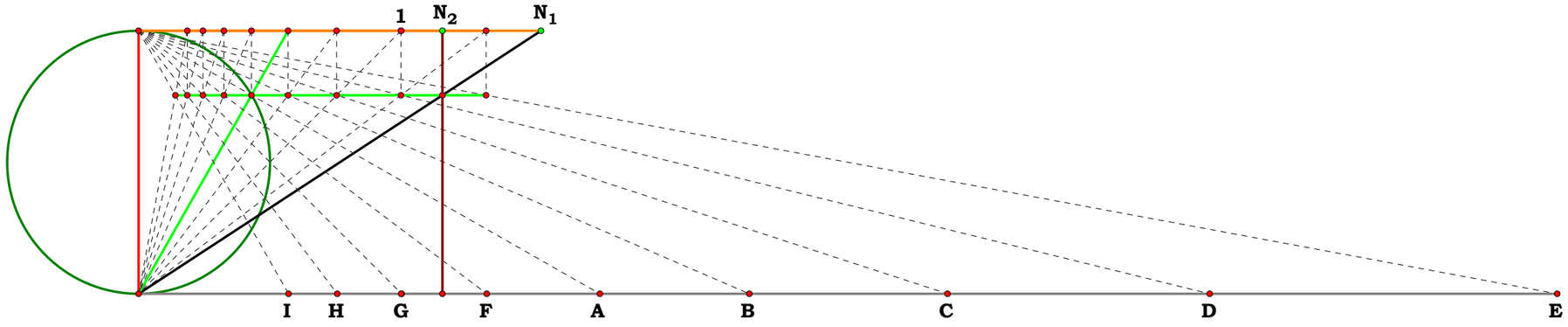
E = 5.60741 $\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1^{\,4}}{N_2}$ -E = 0.00000

F = 0.48697 $\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1^{\,-1}}{N_2}$ -F = 0.00000

G = 0.29871 $\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1^{\,-2}}{N_2}$ -G = 0.00000

H = 0.18323 $\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1^{\,-3}}{N_2}$ -H = 0.00000

I = 0.11239 $\sqrt{\frac{N_1-N_2}{N_2}}\cdot\frac{N_1^{\,-4}}{N_2}$ -I = 0.00000



$$\sqrt{\frac{N_2}{N_1-N_2}} = 1.75589$$

$$\frac{N_1}{N_2} = 1.32434$$

$N_1 = 1.53175$

$N_2 = 1.15661$

A = 1.75589
B = 2.32540
C = 3.07963
D = 4.07849
E = 5.40133

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{0} - A = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{1} - B = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{2} - C = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{3} - D = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{4} - E = 0.00000$$

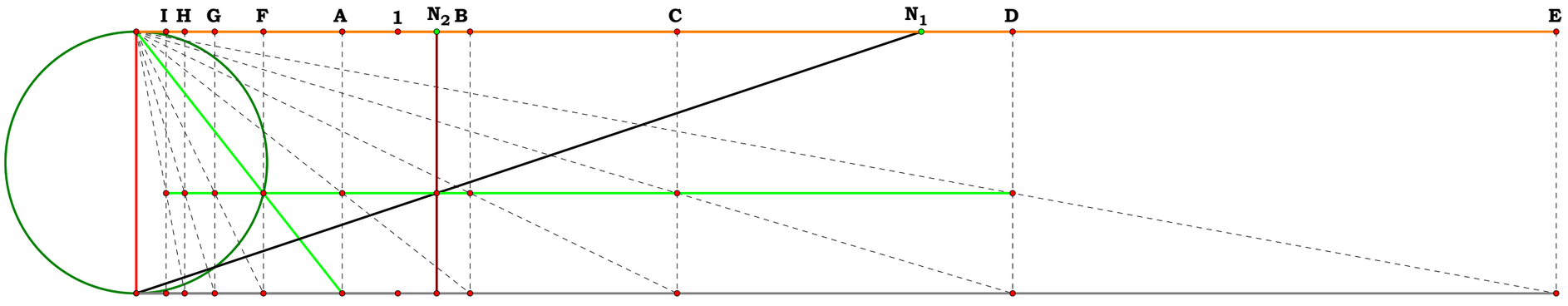
F = 1.32585
G = 1.00114
H = 0.75595
I = 0.57081

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{-1} - F = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{-2} - G = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{-3} - H = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{-4} - I = 0.00000$$



$$\sqrt{\frac{N_2}{N_1-N_2}} = 0.78754$$

$$\frac{N_1}{N_1-N_2} = 1.62022$$

$N_1 = 3.00000$

$N_2 = 1.14840$

$A = 0.78754$

$B = 1.27600$

$C = 2.06740$

$D = 3.34965$

$E = 5.42718$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{0} - A = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{1} - B = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{2} - C = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{3} - D = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{4} - E = 0.00000$$

$F = 0.48607$

$G = 0.30000$

$H = 0.18516$

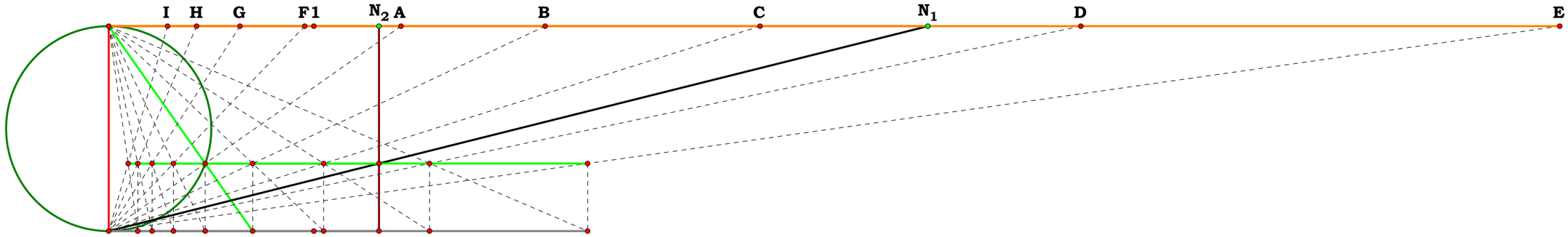
$I = 0.11428$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{-1} - F = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{-2} - G = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{-3} - H = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{-4} - I = 0.00000$$



$$\sqrt{\frac{N_1-N_2}{N_2}} = 1.42482$$

$$\frac{N_1}{N_1-N_2} = 1.49258$$

$N_1 = 3.99177$

$N_2 = 1.31737$

$A = 1.42482$

$B = 2.12666$

$C = 3.17422$

$D = 4.73779$

$E = 7.07155$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{0} - A = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{1} - B = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{2} - C = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{3} - D = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{4} - E = 0.00000$$

$F = 0.95460$

$G = 0.63956$

$H = 0.42849$

$I = 0.28708$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{-1} - F = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{-2} - G = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{-3} - H = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{-4} - I = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2} = 0.83725$$

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot N_2+N_1} = 1.12397$$

A = 0.83725
B = 0.94105
C = 1.05771
D = 1.18884
E = 1.33622

F = 0.74490
G = 0.66274
H = 0.58964
I = 0.52461

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{0}}{N_1\cdot N_2+N_1} - A = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{1}}{N_1\cdot N_2+N_1} - B = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{2}}{N_1\cdot N_2+N_1} - C = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{3}}{N_1\cdot N_2+N_1} - D = 0.00000$$

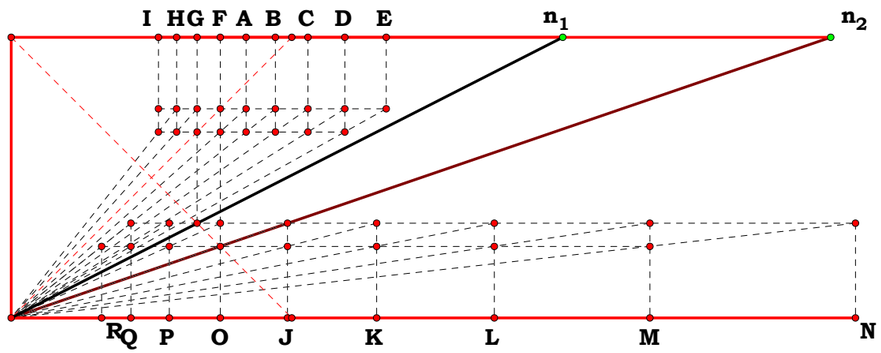
$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{4}}{N_1\cdot N_2+N_1} - E = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-1}}{N_1\cdot N_2+N_1} - F = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-2}}{N_1\cdot N_2+N_1} - G = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-3}}{N_1\cdot N_2+N_1} - H = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-4}}{N_1\cdot N_2+N_1} - I = 0.00000$$



$$\frac{N_2}{N_1+1} = 0.98482$$

$$\frac{N_2+1}{N_1+1} = 1.32208$$

N_1 = 1.96510
N_2 = 2.92011

J = 0.98482
K = 1.30202
L = 1.72138
M = 2.27580
N = 3.00879

O = 0.74490
P = 0.56343
Q = 0.42617
R = 0.32235

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{0}}{N_1+1} - J = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{1}}{N_1+1} - K = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{2}}{N_1+1} - L = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{3}}{N_1+1} - M = 0.00000$$

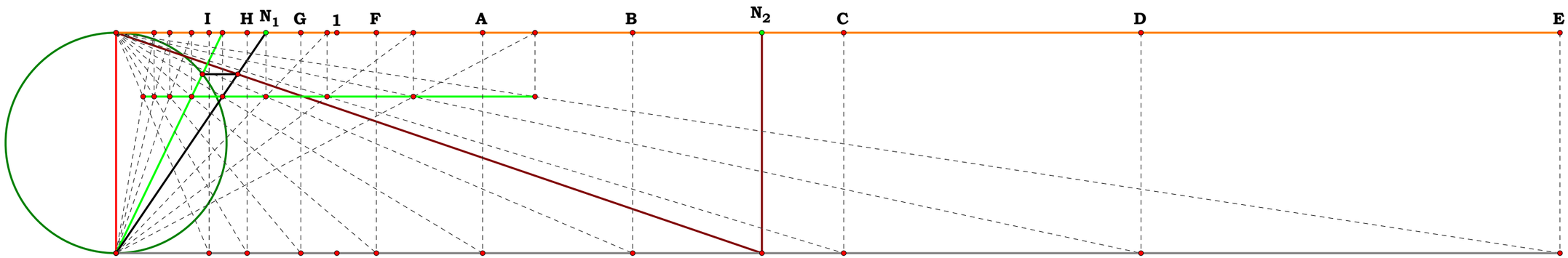
$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{4}}{N_1+1} - N = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-1}}{N_1+1} - O = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-2}}{N_1+1} - P = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-3}}{N_1+1} - Q = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-4}}{N_1+1} - R = 0.00000$$



$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} = 1.66035$$

$$\sqrt{N_1 \cdot N_2} = 1.40869$$

$N_1 = 0.67856$

$N_2 = 2.92441$

$A = 1.66035$

$B = 2.33892$

$C = 3.29480$

$D = 4.64135$

$E = 6.53820$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,0}} - A = 0.00000$$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,1}} - B = 0.00000$$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,2}} - C = 0.00000$$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,3}} - D = 0.00000$$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,4}} - E = 0.00000$$

$F = 1.17865$

$G = 0.83670$

$H = 0.59396$

$I = 0.42164$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,-1}} - F = 0.00000$$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,-2}} - G = 0.00000$$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,-3}} - H = 0.00000$$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2^{\,-4}} - I = 0.00000$$

N[1] -> 0

N[1] -> 1

N[1] -> 2

N[1] -> 3

N[1] -> 4

N[1] -> 5

N[1] -> 6

N[1] -> 7

N[1] -> 8

N[1] -> 9

N[1] -> 10

N[1] -> 11

N[2] -> 0

N[2] -> 1

N[2] -> 2

N[2] -> 3

N[2] -> 4

N[2] -> 5

N[2] -> 6

N[2] -> 7

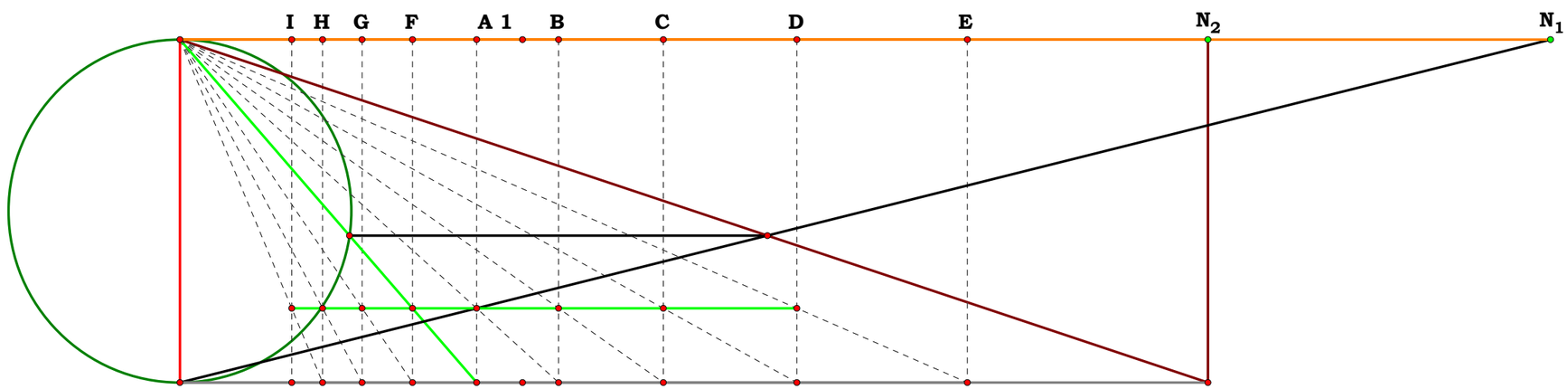
N[2] -> 8

N[2] -> 9

N[2] -> 10

N[2] -> 11

Hide Action Buttons



$\sqrt{\frac{N_2}{N_1}} = 0.86603$

$\frac{B}{A} = 1.27633$

$N_1 = 4.00000$

$N_2 = 3.00000$

$\frac{N_2}{N_1} = 0.75000$

A = 0.86603

B = 1.10534

C = 1.41078

D = 1.80063

E = 2.29820

$\sqrt{\frac{N_2}{N_1}} - A = 0.00000$

$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B}{A} - B = 0.00000$

$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^2}{A} - C = 0.00000$

$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^3}{A} - D = 0.00000$

$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^4}{A} - E = 0.00000$

F = 0.67853

G = 0.53162

H = 0.41652

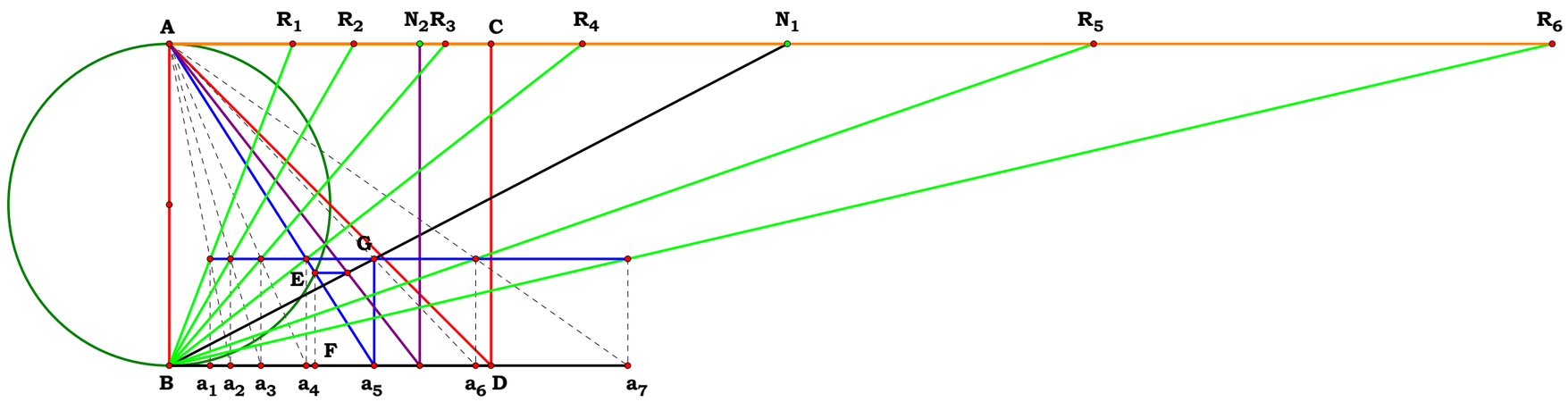
I = 0.32634

$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^{-1}}{A} - F = 0.00000$

$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^{-2}}{A} - G = 0.00000$

$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^{-3}}{A} - H = 0.00000$

$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^{-4}}{A} - I = 0.00000$



$N_1 = 1.92028$
$N_2 = 0.77822$
$R_1 = 0.38347$
$R_2 = 0.57364$
$R_3 = 0.85812$
$R_4 = 1.28368$
$R_5 = 2.87259$
$R_6 = 4.29718$

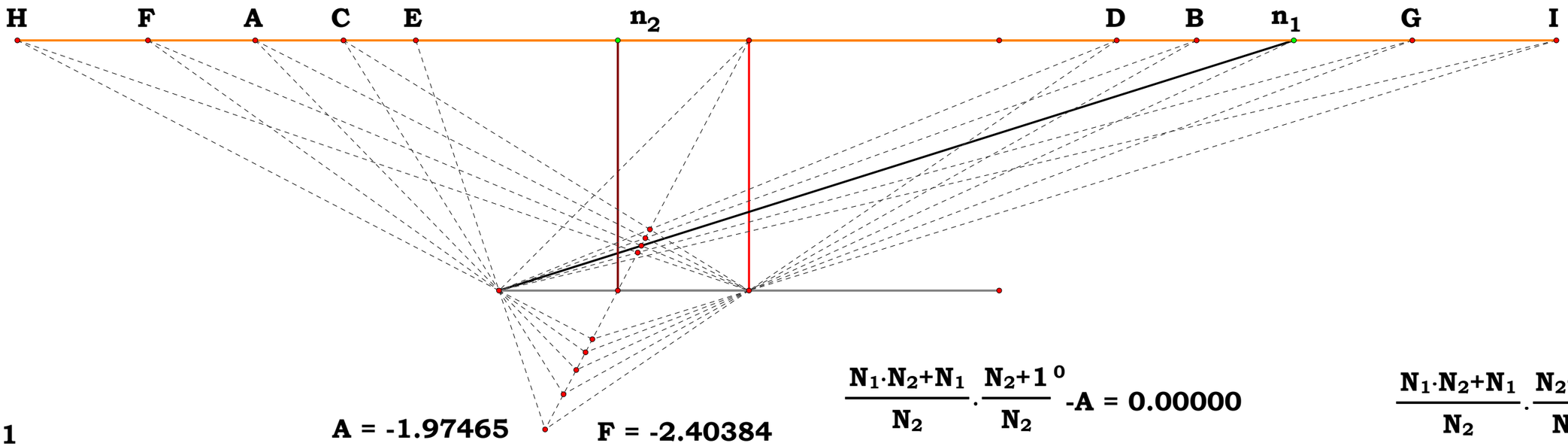
$$\frac{N_1^2}{N_1^2-\sqrt{N_1 \cdot N_2}} = 1.49592$$

$$R_1-N_1 \cdot \left(\frac{N_1^2}{N_1^2-\sqrt{N_1 \cdot N_2}}\right)^{-4} = 0.00000 \qquad R_5-N_1 \cdot \frac{N_1^2}{N_1^2-\sqrt{N_1 \cdot N_2}} = 0.00000$$

$$R_2-N_1 \cdot \left(\frac{N_1^2}{N_1^2-\sqrt{N_1 \cdot N_2}}\right)^{-3} = 0.00000 \qquad R_6-N_1 \cdot \left(\frac{N_1^2}{N_1^2-\sqrt{N_1 \cdot N_2}}\right)^{2} = 0.00000$$

$$R_3-N_1 \cdot \left(\frac{N_1^2}{N_1^2-\sqrt{N_1 \cdot N_2}}\right)^{-2} = 0.00000$$

$$R_4-N_1 \cdot \left(\frac{N_1^2}{N_1^2-\sqrt{N_1 \cdot N_2}}\right)^{-1} = 0.00000$$



$$\frac{N_2+1}{N_2} = -0.90634$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} = -1.97465$$

$N_1 = 2.17870$

$N_2 = -0.52456$

A = -1.97465

B = 1.78970

C = -1.62208

D = 1.47016

E = -1.33247

F = -2.40384

G = 2.65225

H = -2.92632

I = 3.22872

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{0} - A = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{1} - B = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{2} - C = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{3} - D = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{4} - E = 0.00000$$

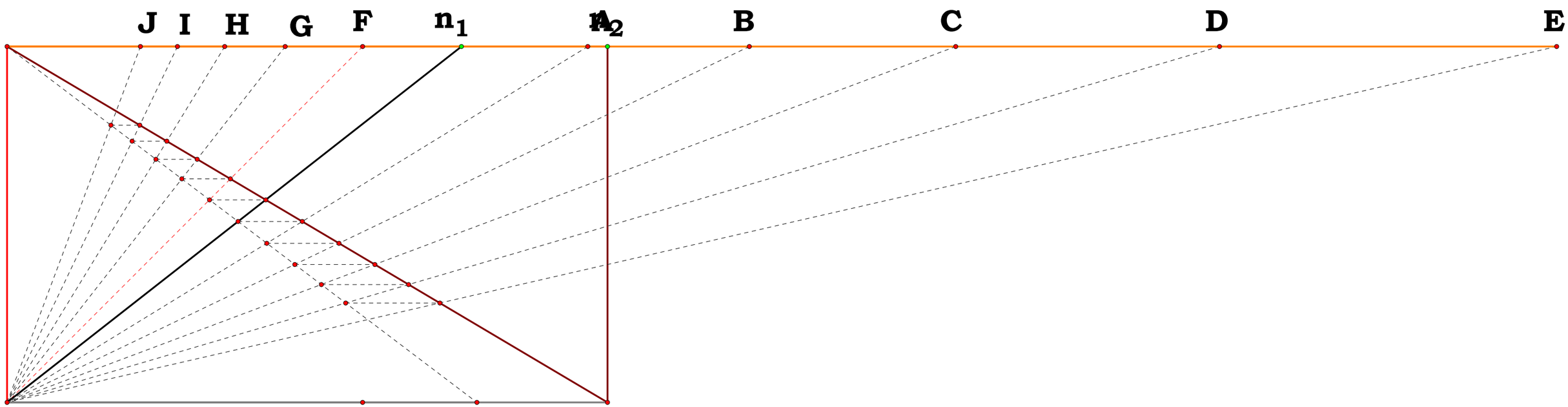
$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-1} - N_1 = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-2} - F = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-3} - G = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-4} - H = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-5} - I = 0.00000$$



$N_1 = 1.27809$

$N_2 = 1.68896$

$A = 1.63353$

$B = 2.08780$

$C = 2.66841$

$D = 3.41048$

$E = 4.35891$

$F = 1.00000$

$G = 0.78241$

$H = 0.61217$

$I = 0.47897$

$J = 0.37476$

$N_1^2\text{-}A = 0.00000$

$N_1^3\text{-}B = 0.00000$

$N_1^4\text{-}C = 0.00000$

$N_1^5\text{-}D = 0.00000$

$N_1^6\text{-}E = 0.00000$

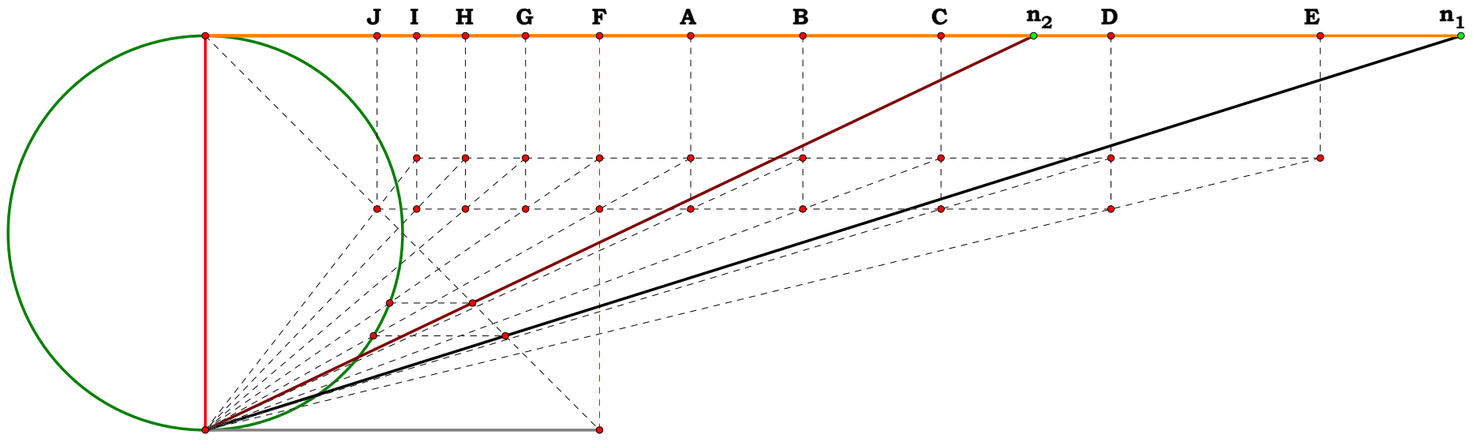
$N_1^0\text{-}F = 0.00000$

$N_1^{-1}\text{-}G = 0.00000$

$N_1^{-2}\text{-}H = 0.00000$

$N_1^{-3}\text{-}I = 0.00000$

$N_1^{-4}\text{-}J = 0.00000$



$\frac{\sqrt{N_1}}{\sqrt{N_2}} = 1.23112$

$N_1 = 3.18458$

$N_2 = 2.10112$

A = 1.23112

B = 1.51566

C = 1.86597

D = 2.29723

E = 2.82817

F = 1.00000

G = 0.81227

H = 0.65978

I = 0.53592

J = 0.43531

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^1$ -A = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^2$ -B = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^3$ -C = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^4$ -D = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^5$ -E = 0.00000

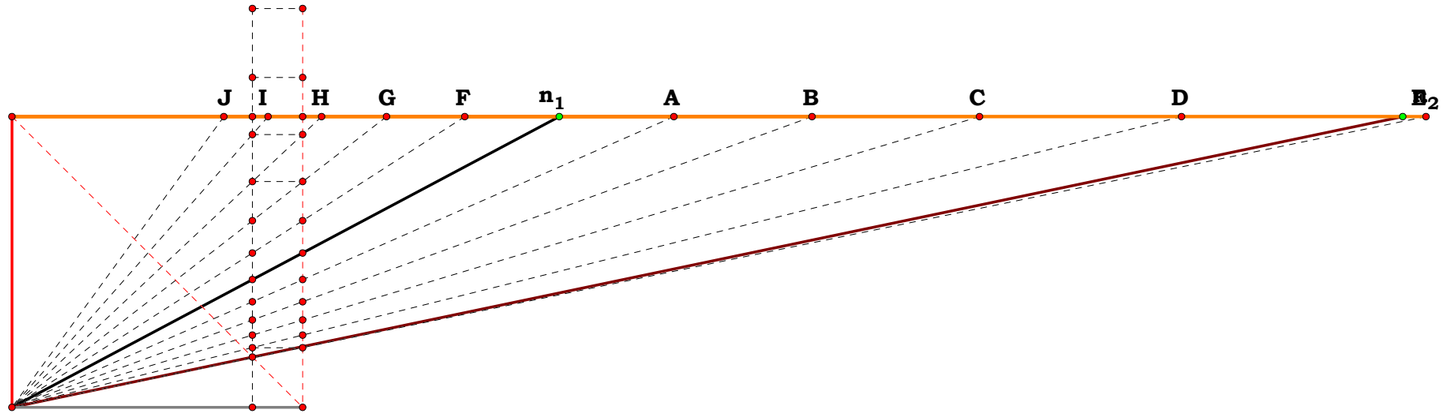
$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^0$ -F = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^{-1}$ -G = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^{-2}$ -H = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^{-3}$ -I = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^{-4}$ -J = 0.00000



$$\frac{N_1 \cdot N_2 + N_1}{N_2} = 2.27629$$

$$\frac{N_2 + 1}{N_2} = 1.20903$$

$N_1 = 1.88273$

$N_2 = 4.78390$

A = 2.27629
B = 2.75211
C = 3.32740
D = 4.02294
E = 4.86387

F = 1.55722
G = 1.28799
H = 1.06530
I = 0.88112
J = 0.72878

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,0}}{N_2} - A = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,1}}{N_2} - B = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,2}}{N_2} - C = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,3}}{N_2} - D = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,4}}{N_2} - E = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-1}}{N_2} - N_1 = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-2}}{N_2} - F = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-3}}{N_2} - G = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-4}}{N_2} - H = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-5}}{N_2} - I = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-6}}{N_2} - J = 0.00000$$

$N_1 = 2.10483$

$N_2 = 2.59960$

$x_A = 2.10483$

$x_B = 2.59960$

$x_C = 3.21068$

$x_D = 3.96539$

$x_E = 4.89752$

$x_F = 1.70423$

$x_G = 1.37987$

$x_H = 1.11724$

$x_I = 0.90460$

$\frac{N_2^0}{N_1^{-1}} = 2.10483$

$\frac{N_2^1}{N_1^0} = 2.59960$

$\frac{N_2^2}{N_1^1} = 3.21068$

$\frac{N_2^3}{N_1^2} = 3.96539$

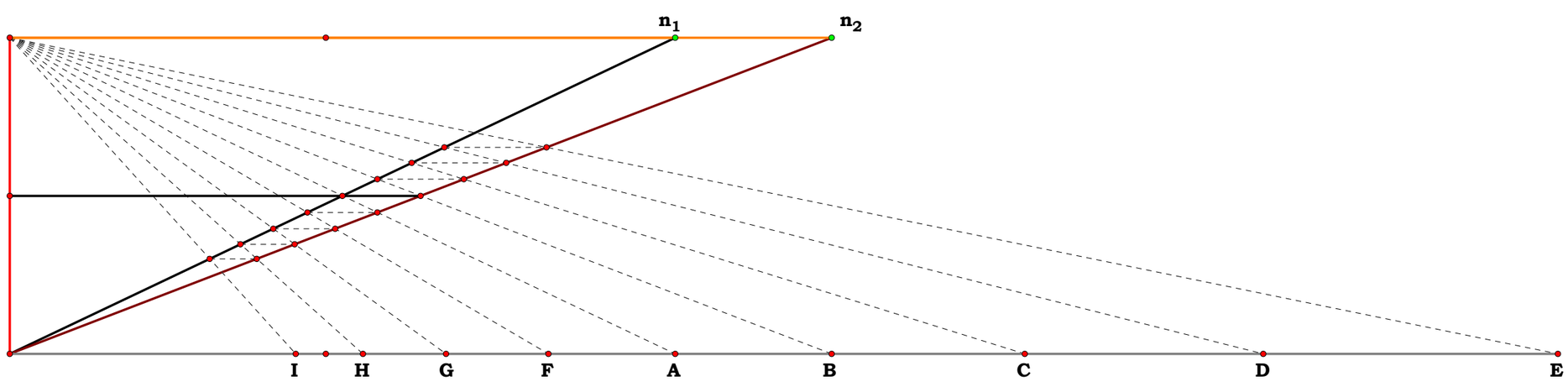
$\frac{N_2^4}{N_1^3} = 4.89752$

$\frac{N_2^{-1}}{N_1^{-2}} = 1.70423$

$\frac{N_2^{-2}}{N_1^{-3}} = 1.37987$

$\frac{N_2^{-3}}{N_1^{-4}} = 1.11724$

$\frac{N_2^{-4}}{N_1^{-5}} = 0.90460$



A^2-B = 0.00000
(A·B)-C = 0.00000
B^2-D = 0.00000
(B·C)-E = 0.00000

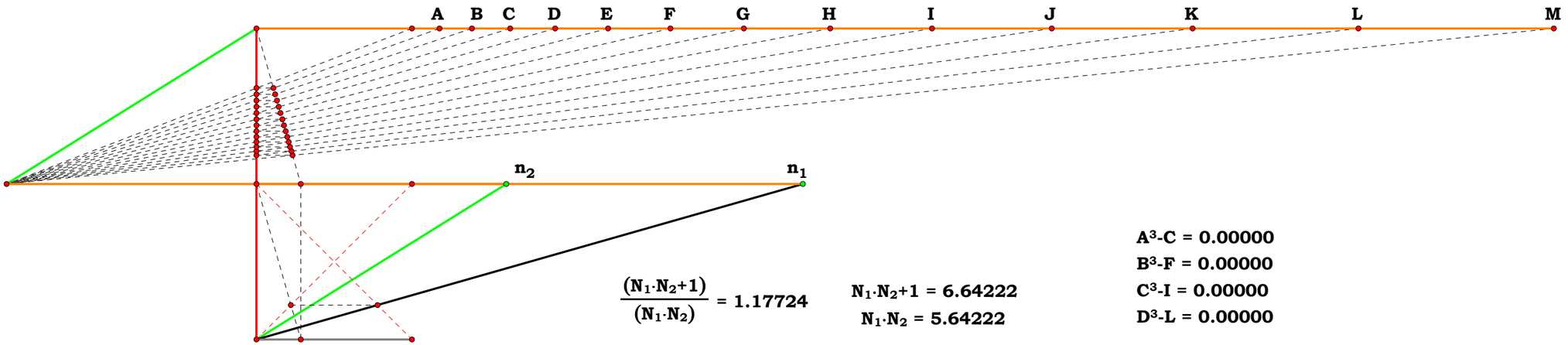
C^2-F = 0.00000
(C·D)-G = 0.00000
D^2-H = 0.00000
(D·E)-I = 0.00000

E^2-J = 0.00000
(E·F)-K = 0.00000
F^2-L = 0.00000
(F·G)-M = 0.00000

$\frac{N_1 \cdot N_2 + 1}{N_1 \cdot N_2}^{1}$ -A = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{2}$ -B = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{3}$ -C = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{4}$ -D = 0.00000

$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{5}$ -E = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{6}$ -F = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{7}$ -G = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{8}$ -H = 0.00000

$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{9}$ -I = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{10}$ -J = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{11}$ -K = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{12}$ -L = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{13}$ -M = 0.00000



$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}$ = 1.17724

$N_1 \cdot N_2 + 1$ = 6.64222
$N_1 \cdot N_2$ = 5.64222

A^3-C = 0.00000
B^3-F = 0.00000
C^3-I = 0.00000
D^3-L = 0.00000

N_1 = 3.51340
N_2 = 1.60591

A = 1.17724
B = 1.38588
C = 1.63151
D = 1.92067
E = 2.26108

F = 2.66183
G = 3.13360
H = 3.68898
I = 4.34280

J = 5.11249
K = 6.01861
L = 7.08532
M = 8.34108

A^2 = 1.38588
A·B = 1.63151
B^2 = 1.92067
B·C = 2.26108

C^2 = 2.66183
C·D = 3.13360
D^2 = 3.68898
D·E = 4.34280

E^2 = 5.11249
E·F = 6.01861
F^2 = 7.08532
F·G = 8.34108

B = 1.31080
C = 1.71820
D = 2.25222
E = 2.95221
F = 3.86977
G = 5.07250

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)} = 1.31080 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{1} - B = 0.00000$$

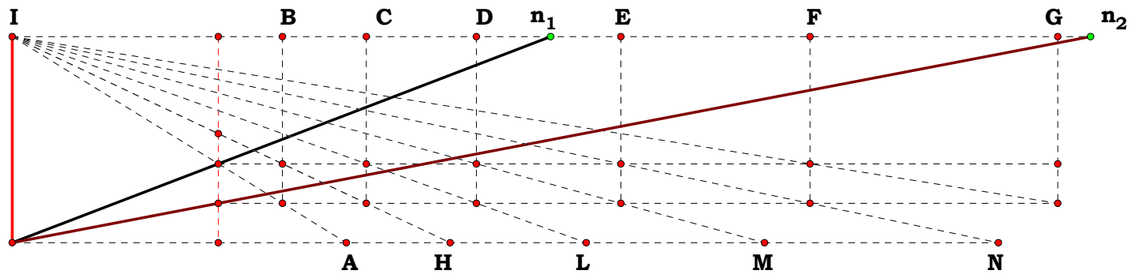
$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2} = 1.71820 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2} - C = 0.00000$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3} = 2.25222 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3} - D = 0.00000$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{4} = 2.95221 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{4} - E = 0.00000$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{5} = 3.86977 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{5} - F = 0.00000$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{6} = 5.07250 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{6} - G = 0.00000$$



$$\frac{N_1}{N_1-1} - A = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2} = 2.12423$$

N_1 = 2.61146
N_2 = 5.23175

A = 1.62056
H = 2.12423
L = 2.78444
M = 3.64985
N = 4.78423

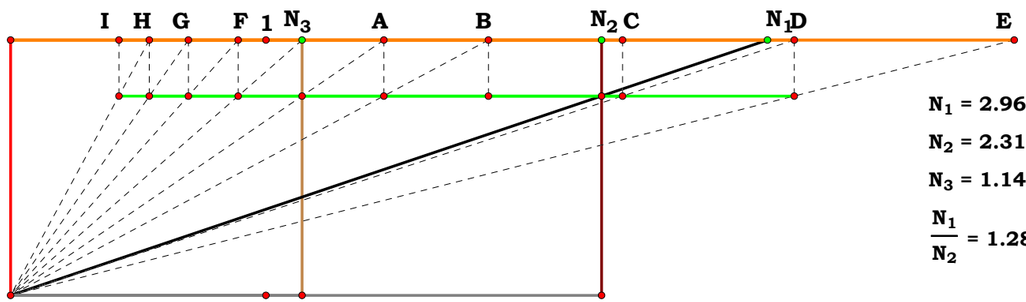
$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{-1} = 1.62056 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{-1}\right) - A = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{0} = 2.12423 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{0}\right) - H = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{1} = 2.78444 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{1}\right) - L = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2} = 3.64985 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2}\right) - M = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3} = 4.78423 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3}\right) - N = 0.00000$$



$N_1 = 2.96382$

$N_2 = 2.31441$

$N_3 = 1.14115$

$\frac{N_1}{N_2} = 1.28059$

$A = 1.46135$

$B = 1.87140$

$C = 2.39649$

$D = 3.06893$

$E = 3.93005$

$F = 0.89111$

$G = 0.69586$

$H = 0.54339$

$I = 0.42433$

$N_3 \cdot \frac{N_1^{\,1}}{N_2} - A = 0.00000$

$N_3 \cdot \frac{N_1^{\,2}}{N_2} - B = 0.00000$

$N_3 \cdot \frac{N_1^{\,3}}{N_2} - C = 0.00000$

$N_3 \cdot \frac{N_1^{\,4}}{N_2} - D = 0.00000$

$N_3 \cdot \frac{N_1^{\,5}}{N_2} - E = 0.00000$

$N_3 \cdot \frac{N_1^{\,-1}}{N_2} - F = 0.00000$

$N_3 \cdot \frac{N_1^{\,-2}}{N_2} - G = 0.00000$

$N_3 \cdot \frac{N_1^{\,-3}}{N_2} - H = 0.00000$

$N_3 \cdot \frac{N_1^{\,-4}}{N_2} - I = 0.00000$

Plate 5

$\frac{N_1 \cdot N_3}{N_2} - A = 0.00000$

$\frac{N_1^{\,2} \cdot N_3}{N_2^{\,2}} - B = 0.00000$

$\frac{N_1^{\,3} \cdot N_3}{N_2^{\,3}} - C = 0.00000$

$\frac{N_1^{\,4} \cdot N_3}{N_2^{\,4}} - D = 0.00000$

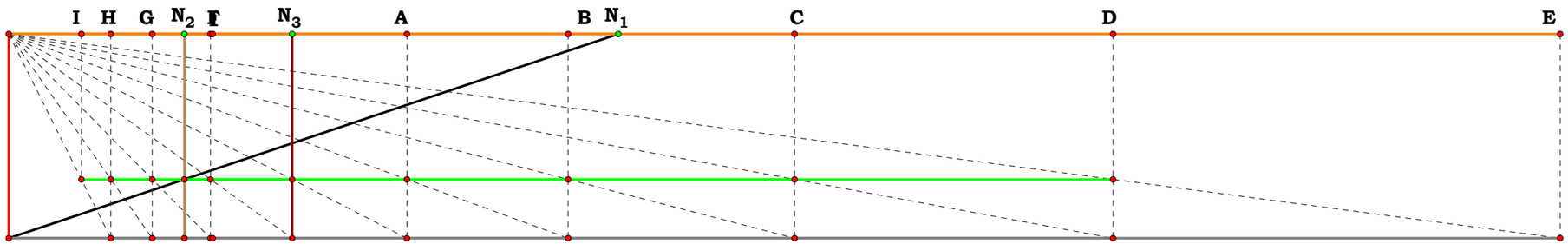
$\frac{N_1^{\,5} \cdot N_3}{N_2^{\,5}} - E = 0.00000$

$\frac{N_2^{\,4} \cdot N_3}{N_1^{\,4}} - I = 0.00000$

$\frac{N_2^{\,3} \cdot N_3}{N_1^{\,3}} - H = 0.00000$

$\frac{N_2^{\,2} \cdot N_3}{N_1^{\,2}} - G = 0.00000$

$\frac{N_2 \cdot N_3}{N_1} - F = 0.00000$



$N_1 = 2.98906$

$N_2 = 0.86166$

$N_3 = 1.38922$

$\frac{N_1}{N_1-N_2} = 1.40503$

$A = 1.95189$

$B = 2.74246$

$C = 3.85323$

$D = 5.41390$

$E = 7.60667$

$F = 0.98875$

$G = 0.70372$

$H = 0.50086$

$I = 0.35648$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{1} - A = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{2} - B = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{3} - C = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{4} - D = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{5} - E = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-1} - F = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-2} - G = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-3} - H = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-4} - I = 0.00000$

$\frac{N_1 \cdot N_3}{N_1-N_2} - A = 0.00000$

$\frac{N_1^2 \cdot N_3}{(N_1^2-2 \cdot N_1 \cdot N_2)+N_2^2} - B = 0.00000$

$\frac{N_1^3 \cdot N_3}{((N_1^3-3 \cdot N_1^2 \cdot N_2)+3 \cdot N_1 \cdot N_2^2)-N_2^3} - C = 0.00000$

$\frac{N_1^4 \cdot N_3}{(((N_1^4-4 \cdot N_1^3 \cdot N_2)+6 \cdot N_1^2 \cdot N_2^2)-4 \cdot N_1 \cdot N_2^3)+N_2^4} - D = 0.00000$

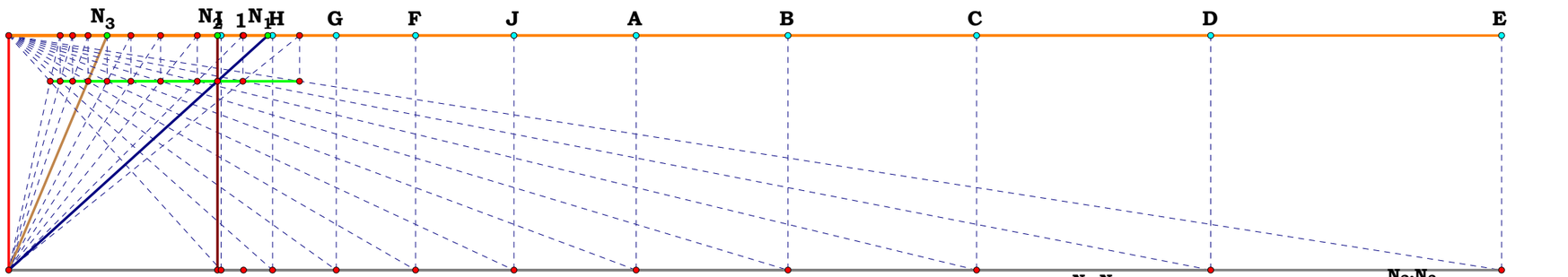
$\frac{N_1^5 \cdot N_3}{((((N_1^5-5 \cdot N_1^4 \cdot N_2)+10 \cdot N_1^3 \cdot N_2^2)-10 \cdot N_1^2 \cdot N_2^3)+5 \cdot N_1 \cdot N_2^4)-N_2^5} - E = 0.00000$

$\frac{(((N_1^4 \cdot N_3-4 \cdot N_1^3 \cdot N_2 \cdot N_3)+6 \cdot N_1^2 \cdot N_2^2 \cdot N_3)-4 \cdot N_1 \cdot N_2^3 \cdot N_3)+N_2^4 \cdot N_3}{N_1^4} - I = 0.00000$

$\frac{((N_1^3 \cdot N_3-3 \cdot N_1^2 \cdot N_2 \cdot N_3)+3 \cdot N_1 \cdot N_2^2 \cdot N_3)-N_2^3 \cdot N_3}{N_1^3} - H = 0.00000$

$\frac{(N_1^2 \cdot N_3-2 \cdot N_1 \cdot N_2 \cdot N_3)+N_2^2 \cdot N_3}{N_1^2} - G = 0.00000$

$\frac{N_1 \cdot N_3-N_2 \cdot N_3}{N_1} - F = 0.00000$



$N_1 = 1.10350$

$N_2 = 0.88853$

$N_3 = 0.41903$

$\frac{N_1}{N_2} = 1.24195$

$\frac{N_1 \cdot N_3}{N_1 - N_2} = 2.15096$

$J = 2.15096$

$A = 2.67138$

$B = 3.31772$

$C = 4.12043$

$D = 5.11735$

$E = 6.35548$

$F = 1.73193$

$G = 1.39453$

$H = 1.12286$

$I = 0.90411$

$\frac{N_1^{\,0}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - J = 0.00000$

$\frac{N_1^{\,1}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - A = 0.00000$

$\frac{N_1^{\,2}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - B = 0.00000$

$\frac{N_1^{\,3}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - C = 0.00000$

$\frac{N_1^{\,4}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - D = 0.00000$

$\frac{N_1^{\,5}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - E = 0.00000$

$\frac{N_1^{\,-1}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - F = 0.00000$

$\frac{N_1^{\,-2}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - G = 0.00000$

$\frac{N_1^{\,-3}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - H = 0.00000$

$\frac{N_1^{\,-4}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - I = 0.00000$

$\frac{N_1 \cdot N_3}{N_1 - N_2} - J = 0.00000$

$\frac{N_1^{\,2} \cdot N_3}{N_1 \cdot N_2 - N_2^{\,2}} - A = 0.00000$

$\frac{N_1^{\,3} \cdot N_3}{N_1 \cdot N_2^{\,2} - N_2^{\,3}} - B = 0.00000$

$\frac{N_1^{\,4} \cdot N_3}{N_1 \cdot N_2^{\,3} - N_2^{\,4}} - C = 0.00000$

$\frac{N_1^{\,5} \cdot N_3}{N_1 \cdot N_2^{\,4} - N_2^{\,5}} - D = 0.00000$

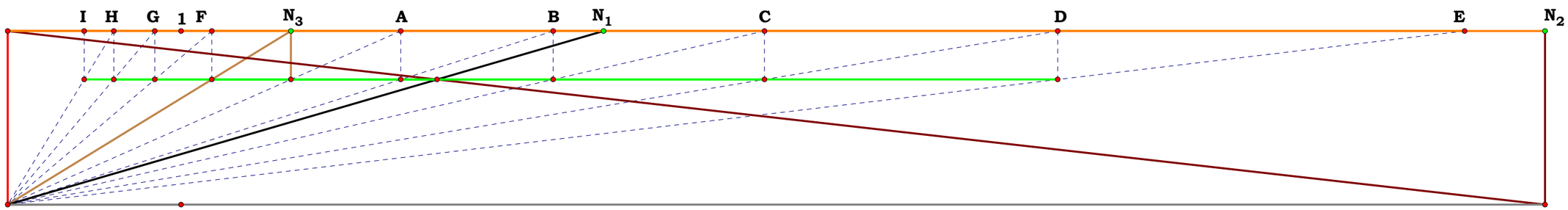
$\frac{N_1^{\,6} \cdot N_3}{N_1 \cdot N_2^{\,5} - N_2^{\,6}} - E = 0.00000$

$\frac{N_2 \cdot N_3}{N_1 - N_2} - F = 0.00000$

$\frac{N_2^{\,2} \cdot N_3}{N_1^{\,2} - N_1 \cdot N_2} - G = 0.00000$

$\frac{N_2^{\,3} \cdot N_3}{N_1^{\,3} - N_1^{\,2} \cdot N_2} - H = 0.00000$

$\frac{N_2^{\,4} \cdot N_3}{N_1^{\,4} - N_1^{\,3} \cdot N_2} - I = 0.00000$



$N_1 = 3.43566$

$N_2 = 8.86571$

$N_3 = 1.63369$

$A = 2.26679$ $\quad N_3 \cdot \frac{N_1+N_2}{N_2}^{1} - A = 0.00000$

$B = 3.14522$ $\quad N_3 \cdot \frac{N_1+N_2}{N_2}^{2} - B = 0.00000$

$C = 4.36406$ $\quad N_3 \cdot \frac{N_1+N_2}{N_2}^{3} - C = 0.00000$

$D = 6.05523$ $\quad N_3 \cdot \frac{N_1+N_2}{N_2}^{4} - D = 0.00000$

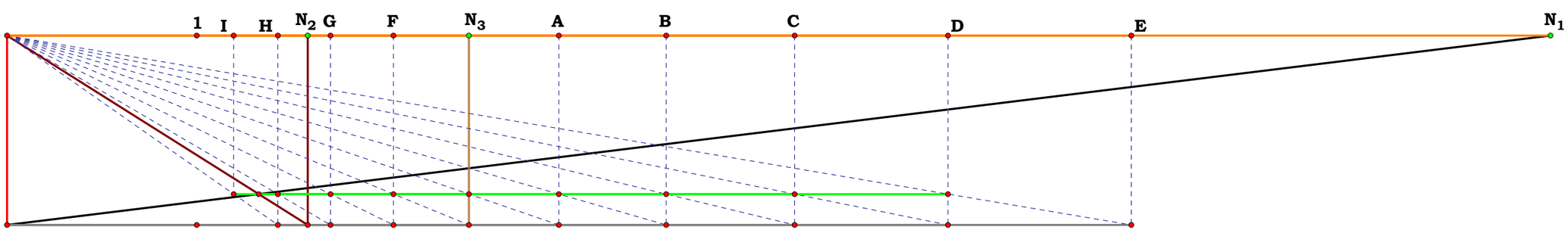
$E = 8.40177$ $\quad N_3 \cdot \frac{N_1+N_2}{N_2}^{5} - E = 0.00000$

$F = 1.17742$ $\quad N_3 \cdot \frac{N_1+N_2}{N_2}^{-1} - F = 0.00000$

$G = 0.84858$ $\quad N_3 \cdot \frac{N_1+N_2}{N_2}^{-2} - G = 0.00000$

$H = 0.61158$ $\quad N_3 \cdot \frac{N_1+N_2}{N_2}^{-3} - H = 0.00000$

$I = 0.44077$ $\quad N_3 \cdot \frac{N_1+N_2}{N_2}^{-4} - I = 0.00000$



$\frac{N_1+N_2}{N_1}$ = 1.19477

A = 2.90820

B = 3.47463

C = 4.15140

D = 4.95998

E = 5.92605

$N_3 \cdot \frac{N_1+N_2}{N_1}$ -A = 0.00000

$N_3 \cdot \frac{N_1+N_2}{N_1}^2$ -B = 0.00000

$N_3 \cdot \frac{N_1+N_2}{N_1}^3$ -C = 0.00000

$N_3 \cdot \frac{N_1+N_2}{N_1}^4$ -D = 0.00000

$N_3 \cdot \frac{N_1+N_2}{N_1}^5$ -E = 0.00000

F = 2.03729

G = 1.70517

H = 1.42719

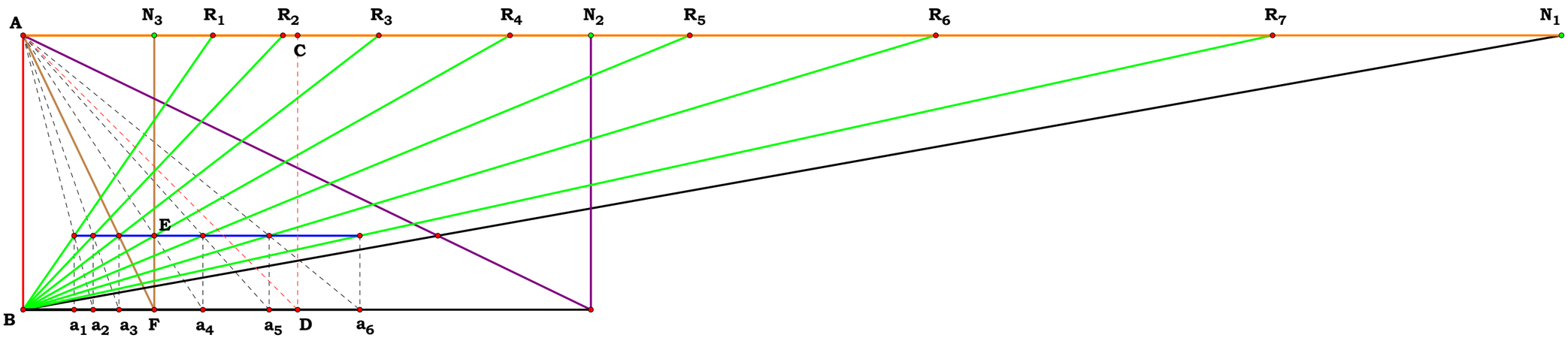
I = 1.19453

$N_3 \cdot \frac{N_1+N_2}{N_1}^{-1}$ -F = 0.00000

$N_3 \cdot \frac{N_1+N_2}{N_1}^{-2}$ -G = 0.00000

$N_3 \cdot \frac{N_1+N_2}{N_1}^{-3}$ -H = 0.00000

$N_3 \cdot \frac{N_1+N_2}{N_1}^{-4}$ -I = 0.00000



$N_1 = 5.60373$

$N_2 = 2.06808$

$N_3 = 0.47811$

$R_1 = 0.69119$

$R_2 = 0.94627$

$R_3 = 1.29550$

$R_4 = 1.77360$

$R_5 = 2.42816$

$R_6 = 3.32429$

$R_7 = 4.55113$

$$\frac{N_1 \cdot N_3}{N_2} = 1.29550$$

$$\frac{N_1 + N_2}{N_1} = 1.36905$$

$$R_1 - \frac{N_1 \cdot N_3}{N_2} \cdot \frac{N_1 + N_2}{N_1}^{-2} = 0.00000$$

$$R_2 - \frac{N_1 \cdot N_3}{N_2} \cdot \frac{N_1 + N_2}{N_1}^{-1} = 0.00000$$

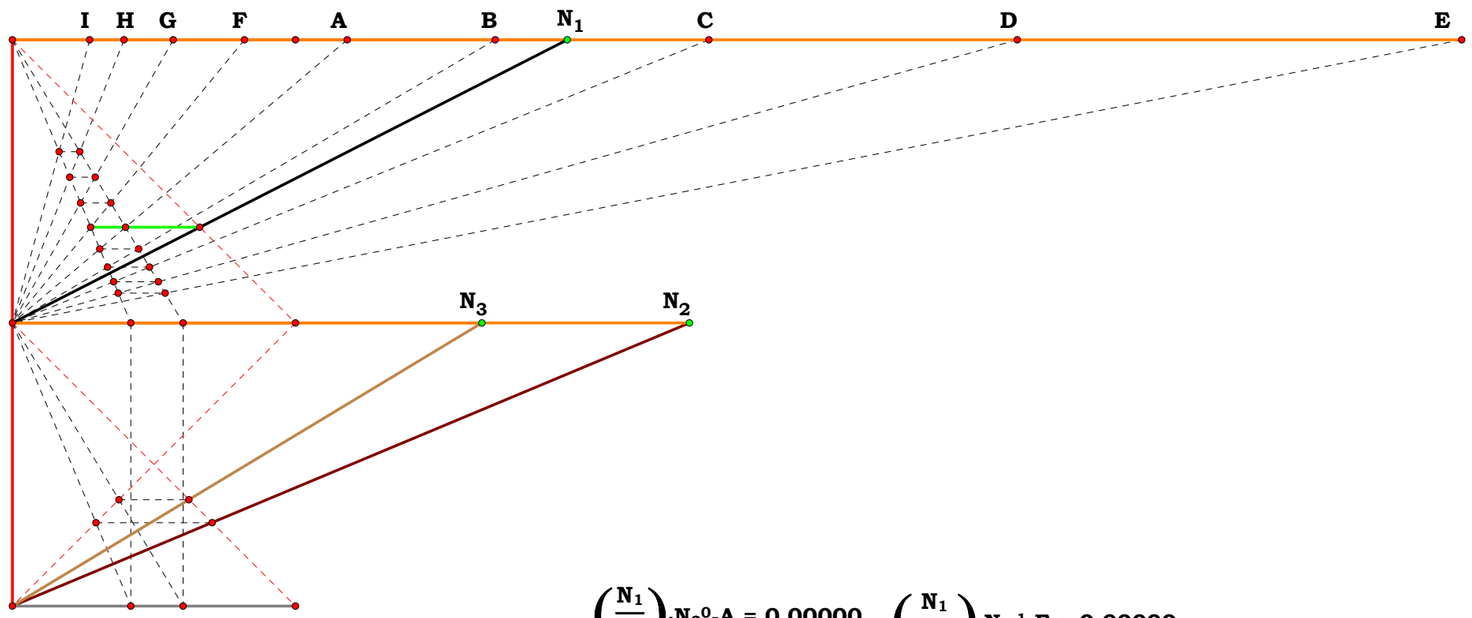
$$R_3 - \frac{N_1 \cdot N_3}{N_2} \cdot \frac{N_1 + N_2}{N_1}^{0} = 0.00000$$

$$R_4 - \frac{N_1 \cdot N_3}{N_2} \cdot \frac{N_1 + N_2}{N_1} = 0.00000$$

$$R_5 - \frac{N_1 \cdot N_3}{N_2} \cdot \frac{N_1 + N_2}{N_1}^{2} = 0.00000$$

$$R_6 - \frac{N_1 \cdot N_3}{N_2} \cdot \frac{N_1 + N_2}{N_1}^{3} = 0.00000$$

$$R_7 - \frac{N_1 \cdot N_3}{N_2} \cdot \frac{N_1 + N_2}{N_1}^{4} = 0.00000$$



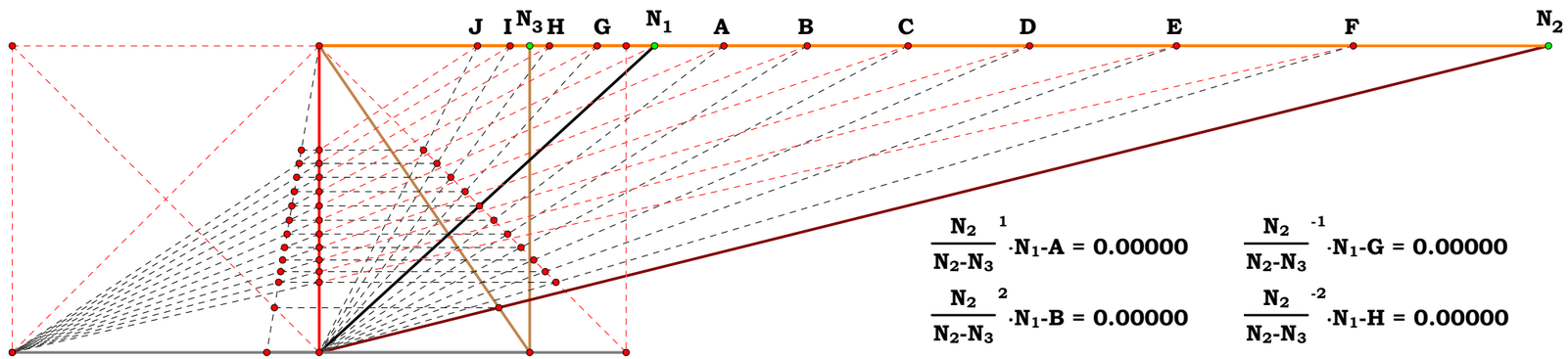
$N_1 = 1.95987$
$N_2 = 2.39124$
$N_3 = 1.65771$

$A = 1.18227$
$B = 1.70541$
$C = 2.46005$
$D = 3.54859$
$E = 5.11881$

$F = 0.81960$
$G = 0.56819$
$H = 0.39389$
$I = 0.27306$

$\left(\frac{N_1}{N_3}\right)\cdot N_2^{0}\text{-}A = 0.00000$
$\left(\frac{N_1}{N_3^{2}}\right)\cdot N_2\text{-}B = 0.00000$
$\left(\frac{N_1}{N_3^{3}}\right)\cdot N_2^{2}\text{-}C = 0.00000$
$\left(\frac{N_1}{N_3^{4}}\right)\cdot N_2^{3}\text{-}D = 0.00000$
$\left(\frac{N_1}{N_3^{5}}\right)\cdot N_2^{4}\text{-}E = 0.00000$

$\left(\frac{N_1}{N_3^{0}}\right)\cdot N_2^{-1}\text{-}F = 0.00000$
$\left(\frac{N_1}{N_3^{-1}}\right)\cdot N_2^{-2}\text{-}G = 0.00000$
$\left(\frac{N_1}{N_3^{-2}}\right)\cdot N_2^{-3}\text{-}H = 0.00000$
$\left(\frac{N_1}{N_3^{-3}}\right)\cdot N_2^{-4}\text{-}I = 0.00000$



$$\frac{N_2}{N_2-N_3}^{1}\cdot N_1\text{-}A = 0.00000 \qquad \frac{N_2}{N_2-N_3}^{-1}\cdot N_1\text{-}G = 0.00000$$

$$\frac{N_2}{N_2-N_3}^{2}\cdot N_1\text{-}B = 0.00000 \qquad \frac{N_2}{N_2-N_3}^{-2}\cdot N_1\text{-}H = 0.00000$$

$$\frac{N_2}{N_2-N_3}^{3}\cdot N_1\text{-}C = 0.00000 \qquad \frac{N_2}{N_2-N_3}^{-3}\cdot N_1\text{-}I = 0.00000$$

$$\frac{N_2}{N_2-N_3}^{4}\cdot N_1\text{-}D = 0.00000 \qquad \frac{N_2}{N_2-N_3}^{-4}\cdot N_1\text{-}J = 0.00000$$

$$\frac{N_2}{N_2-N_3}^{5}\cdot N_1\text{-}E = 0.00000$$

$$\frac{N_2}{N_2-N_3}^{6}\cdot N_1\text{-}F = 0.00000$$

$$\frac{N_1^{\frac{1}{4}}\cdot N_2^{4}}{N_2-N_3}\text{-}D = 0.00000$$

$$\frac{N_1\cdot N_2^{4}}{(N_2-N_3)^{4}}\text{-}D = 0.00000$$

$$\frac{N_2}{N_2-N_3} = 1.20647$$

$N_1 = 1.09230$

$N_2 = 4.00439$

$N_3 = 0.68530$

$A = 1.31783$

$B = 1.58992$

$C = 1.91819$

$D = 2.31425$

$E = 2.79207$

$F = 3.36855$

$G = 0.90537$

$H = 0.75043$

$I = 0.62200$

$J = 0.51556$

Fractional Series Introduction 1

As the first page of the original Series Introduction was a title page with no figure on it, I have decided to do, now, what I did not do, then. This will be a 9 figure series of simple single variable plates helping to learning how to manipulate a universal naming convention making it particular to particular circumstances and particular things while maintaining the given original linguistic concepts.

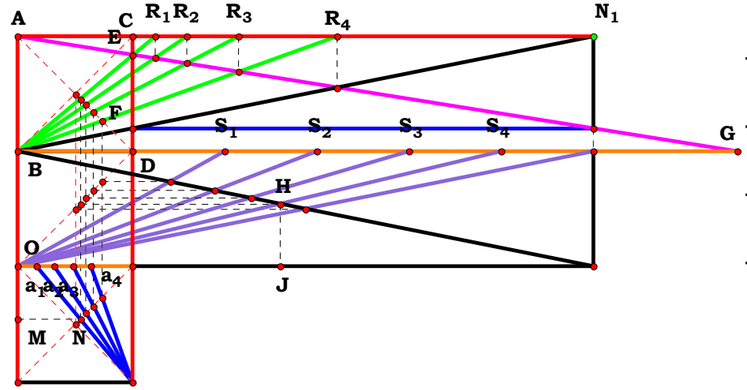
Each of these plates teaches one how, starting from a given unit, to count or enumerate using an extended naming convention defined by the figure itself.

In short, we learn how to enumerate, or count, we learn the basic operations, and then we learn to combine the two to fabricate enumerating systems for particular situations using the given Universal Linguistic Concepts.

Do not forget to read the concluding remarks at the end of the series.

figure 1.

$N_1 = 5.00000$
$R_1 = 1.19048$
$R_2 = 1.47059$
$R_3 = 1.92308$
$R_4 = 2.77778$
$S_1 = 1.80000$
$S_2 = 2.60000$
$S_3 = 3.40000$
$S_4 = 4.20000$
$a_1 = 0.16000$
$a_2 = 0.32000$
$a_3 = 0.48000$
$a_4 = 0.64000$



$\frac{N_1}{R_1} = 4.20000$ $\frac{N_1}{S_1} = 2.77778$ $\frac{N_1}{a_1} = 31.25000$

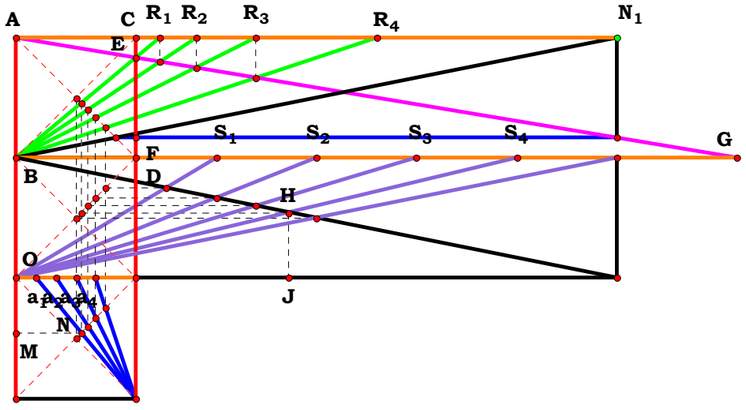
$\frac{N_1}{R_2} = 3.40000$ $\frac{N_1}{S_2} = 1.92308$ $\frac{N_1}{a_2} = 15.62500$

$\frac{N_1}{R_3} = 2.60000$ $\frac{N_1}{S_3} = 1.47059$ $\frac{N_1}{a_3} = 10.41667$

$\frac{N_1}{R_4} = 1.80000$ $\frac{N_1}{S_4} = 1.19048$ $\frac{N_1}{a_4} = 7.81250$

figure 4.

$N_1 = 5.00000$
$R_1 = 1.20000$
$R_2 = 1.50000$
$R_3 = 2.00000$
$R_4 = 3.00000$
$S_1 = 1.66667$
$S_2 = 2.50000$
$S_3 = 3.33333$
$S_4 = 4.16667$
$a_1 = 0.16667$
$a_2 = 0.33333$
$a_3 = 0.50000$
$a_4 = 0.66667$



$\frac{N_1}{R_1} = 4.16667$ $\frac{N_1}{S_1} = 3.00000$ $\frac{N_1}{a_1} = 30.00000$

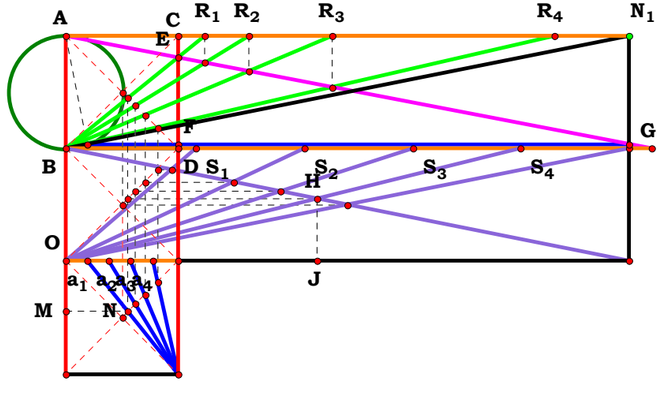
$\frac{N_1}{R_2} = 3.33333$ $\frac{N_1}{S_2} = 2.00000$ $\frac{N_1}{a_2} = 15.00000$

$\frac{N_1}{R_3} = 2.50000$ $\frac{N_1}{S_3} = 1.50000$ $\frac{N_1}{a_3} = 10.00000$

$\frac{N_1}{R_4} = 1.66667$ $\frac{N_1}{S_4} = 1.20000$ $\frac{N_1}{a_4} = 7.50000$

figure 7.

$N_1 = 5.00000$
$R_1 = 1.23810$
$R_2 = 1.62500$
$R_3 = 2.36364$
$R_4 = 4.33333$
$S_1 = 1.15385$
$S_2 = 2.11538$
$S_3 = 3.07692$
$S_4 = 4.03846$
$a_1 = 0.19231$
$a_2 = 0.38462$
$a_3 = 0.57692$
$a_4 = 0.76923$



$\frac{N_1}{R_1} = 4.03846$ $\frac{N_1}{S_1} = 4.33333$ $\frac{N_1}{a_1} = 26.00000$

$\frac{N_1}{R_2} = 3.07692$ $\frac{N_1}{S_2} = 2.36364$ $\frac{N_1}{a_2} = 13.00000$

$\frac{N_1}{R_3} = 2.11538$ $\frac{N_1}{S_3} = 1.62500$ $\frac{N_1}{a_3} = 8.66667$

$\frac{N_1}{R_4} = 1.15385$ $\frac{N_1}{S_2} = 2.36364$ $\frac{N_1}{a_4} = 6.50000$

$AB := 1$

$N_1 := 5$

Figure 1, 2 and 3.

Figure 1.

$$DF := \frac{1}{N_1} \qquad BG := \frac{N_1}{1 - DF} \qquad CE := \frac{1}{BG}$$

$$R_1 := \frac{1}{1 - CE} \qquad R_1 - \frac{{N_1}^2}{{N_1}^2 - (N_1 - 1)} = 0$$

$$\frac{{N_1}^2}{{N_1}^2 - Index \cdot (N_1 - 1)}$$

$$\frac{{N_1}^2}{{N_1}^2 - 2 \cdot (N_1 - 1)} = 1.470588$$

$$\frac{{N_1}^2}{{N_1}^2 - 3 \cdot (N_1 - 1)} = 1.923077$$

$$\frac{{N_1}^2}{{N_1}^2 - 4 \cdot (N_1 - 1)} = 2.777778$$

$N_1 = 5.00000$
$R_1 = 1.19048$
$R_2 = 1.47059$
$R_3 = 1.92308$
$R_4 = 2.77778$

$S_1 = 1.80000$
$S_2 = 2.60000$
$S_3 = 3.40000$
$S_4 = 4.20000$

$a_1 = 0.16000$
$a_2 = 0.32000$
$a_3 = 0.48000$
$a_4 = 0.64000$

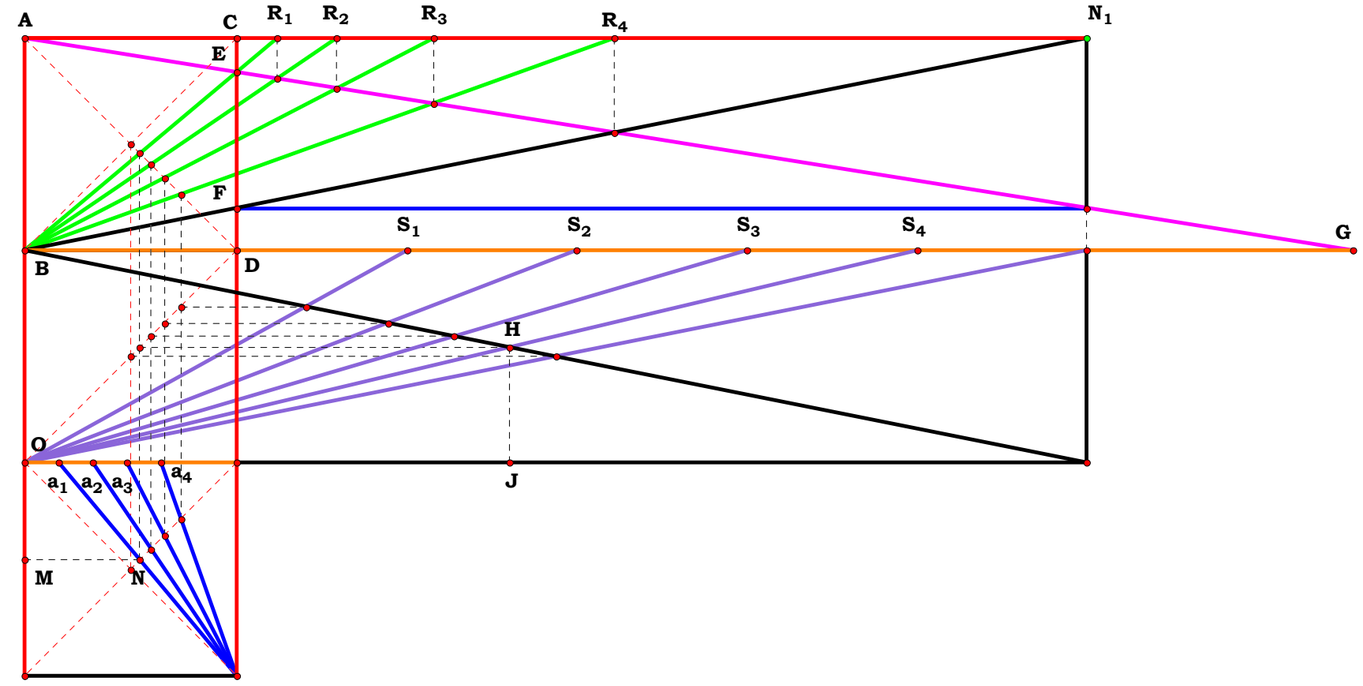


Figure 2.

$$HJ := \frac{1}{R_1 + 1} \qquad JO := N_1 \cdot HJ \qquad S_4 := \frac{JO}{1 - HJ} \qquad S_4 - \frac{N_1}{R_1} = 0 \qquad S_4 = 4.2$$

$$\frac{{N_1}^2 - Index \cdot (N_1 - 1)}{N_1}$$

$$\frac{{N_1}^2 - 1 \cdot (N_1 - 1)}{N_1} = 4.2$$

$$\frac{{N_1}^2 - 2 \cdot (N_1 - 1)}{N_1} = 3.4$$

$$\frac{{N_1}^2 - 3 \cdot (N_1 - 1)}{N_1} = 2.6$$

$$\frac{{N_1}^2 - 4 \cdot (N_1 - 1)}{N_1} = 1.8$$

Interval between consecutive S sub x's.

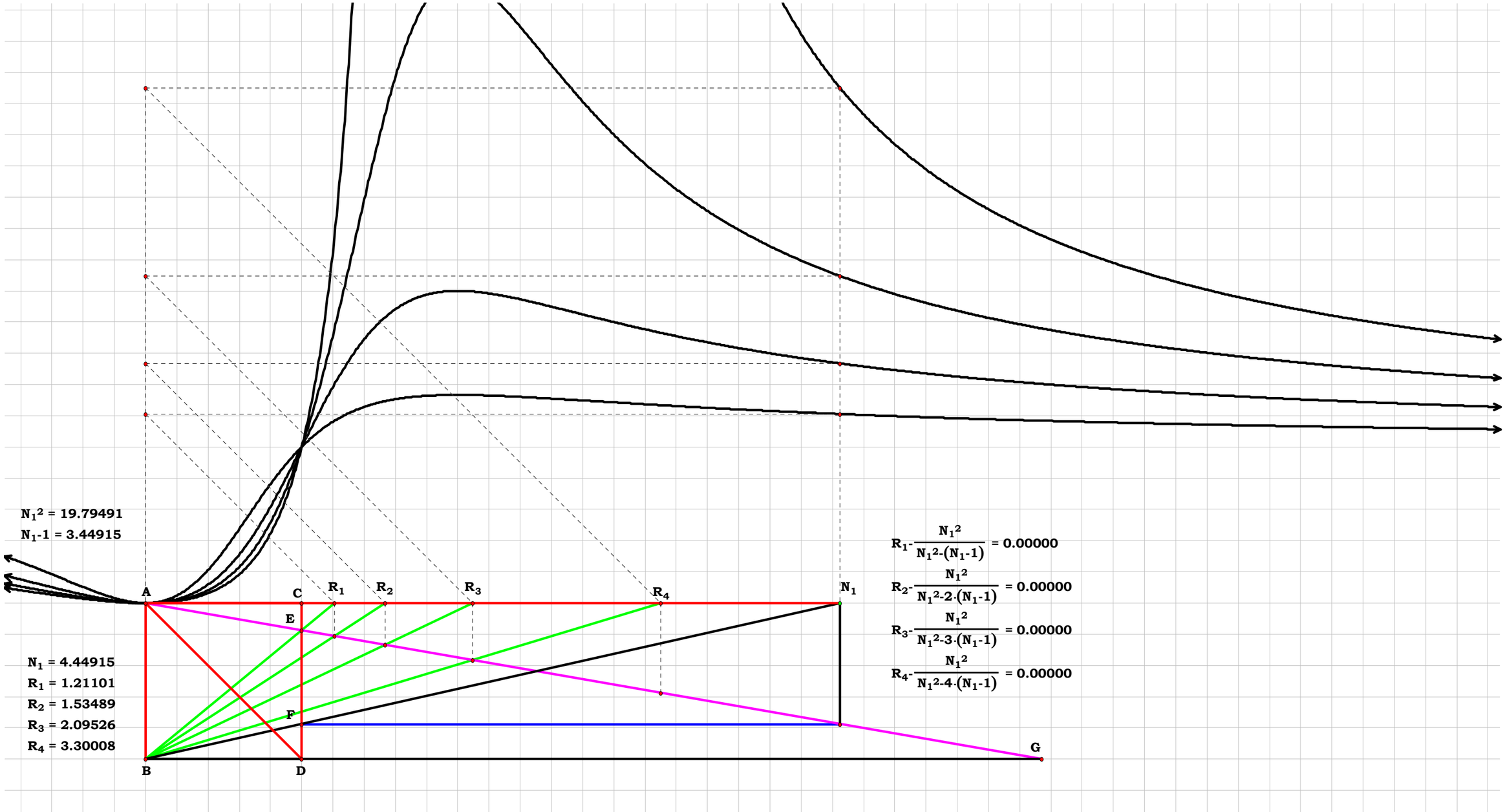
$$\frac{N_1 - 1}{N_1} = 0.8 \qquad S_4 + \frac{N_1 - 1}{N_1} - N_1 = 0$$

Figure 3.

$$MN := R_1 \cdot HJ \qquad a_1 := 1 - \frac{1 - MN}{MN} \qquad \frac{Index \cdot (N_1 - 1)}{{N_1}^2} \qquad a_1 = 0.16$$

$$\frac{2 \cdot (N_1 - 1)}{{N_1}^2} = 0.32 \qquad \frac{3 \cdot (N_1 - 1)}{{N_1}^2} = 0.48 \qquad \frac{1}{a_1} = 6.25$$

$$\frac{3 \cdot (N_1 - 1)}{{N_1}^2} = 0.48 \qquad \frac{4 \cdot (N_1 - 1)}{{N_1}^2} = 0.64$$


N_1^2 = 19.79491
N_1-1 = 3.44915
N_1 = 4.44915
R_1 = 1.21101
R_2 = 1.53489
R_3 = 2.09526
R_4 = 3.30008
A
B
C
D
E
F
G
R_1
R_2
R_3
R_4
N_1
$R_1-\frac{N_1^2}{N_1^2-(N_1-1)}$ = 0.00000
$R_2-\frac{N_1^2}{N_1^2-2\cdot(N_1-1)}$ = 0.00000
$R_3-\frac{N_1^2}{N_1^2-3\cdot(N_1-1)}$ = 0.00000
$R_4-\frac{N_1^2}{N_1^2-4\cdot(N_1-1)}$ = 0.00000

$AB := 1$

$N_1 := 5$

Figure 4, 5 and 6.

Figure 4.

$$DF := \frac{1}{N_1 + 1} \qquad BG := \frac{N_1}{1 - DF} \qquad CE := \frac{1}{BG}$$

$$R_1 := \frac{1}{1 - CE} \qquad R_1 - \frac{N_1 + 1}{N_1} = 0$$

$$\frac{N_1 + 1}{N_1 + 1 - Index}$$

$$\frac{N_1 + 1}{N_1 + 1 - 2} = 1.5$$

$$\frac{N_1 + 1}{N_1 + 1 - 3} = 2$$

$$\frac{N_1 + 1}{N_1 + 1 - 4} = 3$$

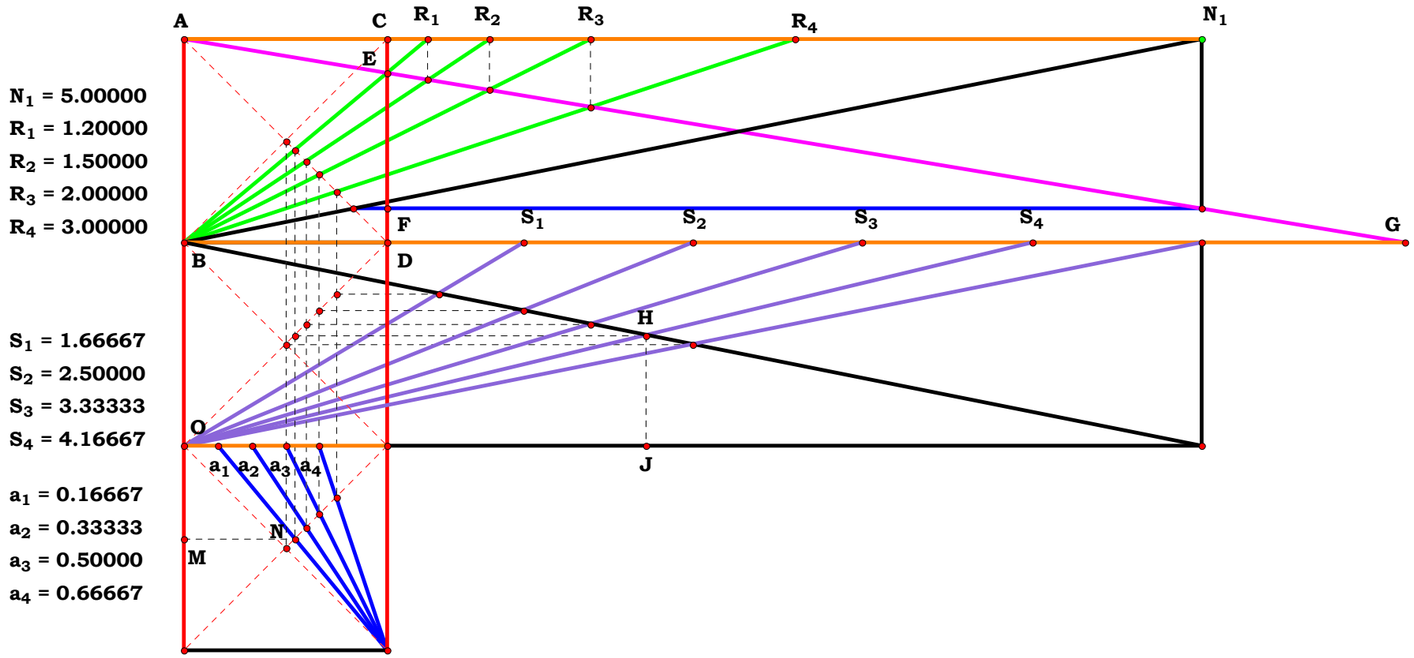


Figure 5.

$$HJ := \frac{1}{R_1 + 1} \qquad JO := N_1 \cdot HJ \qquad S_4 := \frac{JO}{1 - HJ} \qquad S_4 - \frac{N_1}{R_1} = 0 \qquad S_4 = 4.166667$$

$$\frac{N_1 \cdot (N_1 - Index)}{N_1 + 1}$$

$$\frac{N_1 \cdot (N_1 - 0)}{N_1 + 1} = 4.166667$$

$$\frac{N_1 \cdot (N_1 - 1)}{N_1 + 1} = 3.333333$$

$$\frac{N_1 \cdot (N_1 - 2)}{N_1 + 1} = 2.5$$

$$\frac{N_1 \cdot (N_1 - 3)}{N_1 + 1} = 1.666667$$

Interval between consecutive S sub x's.

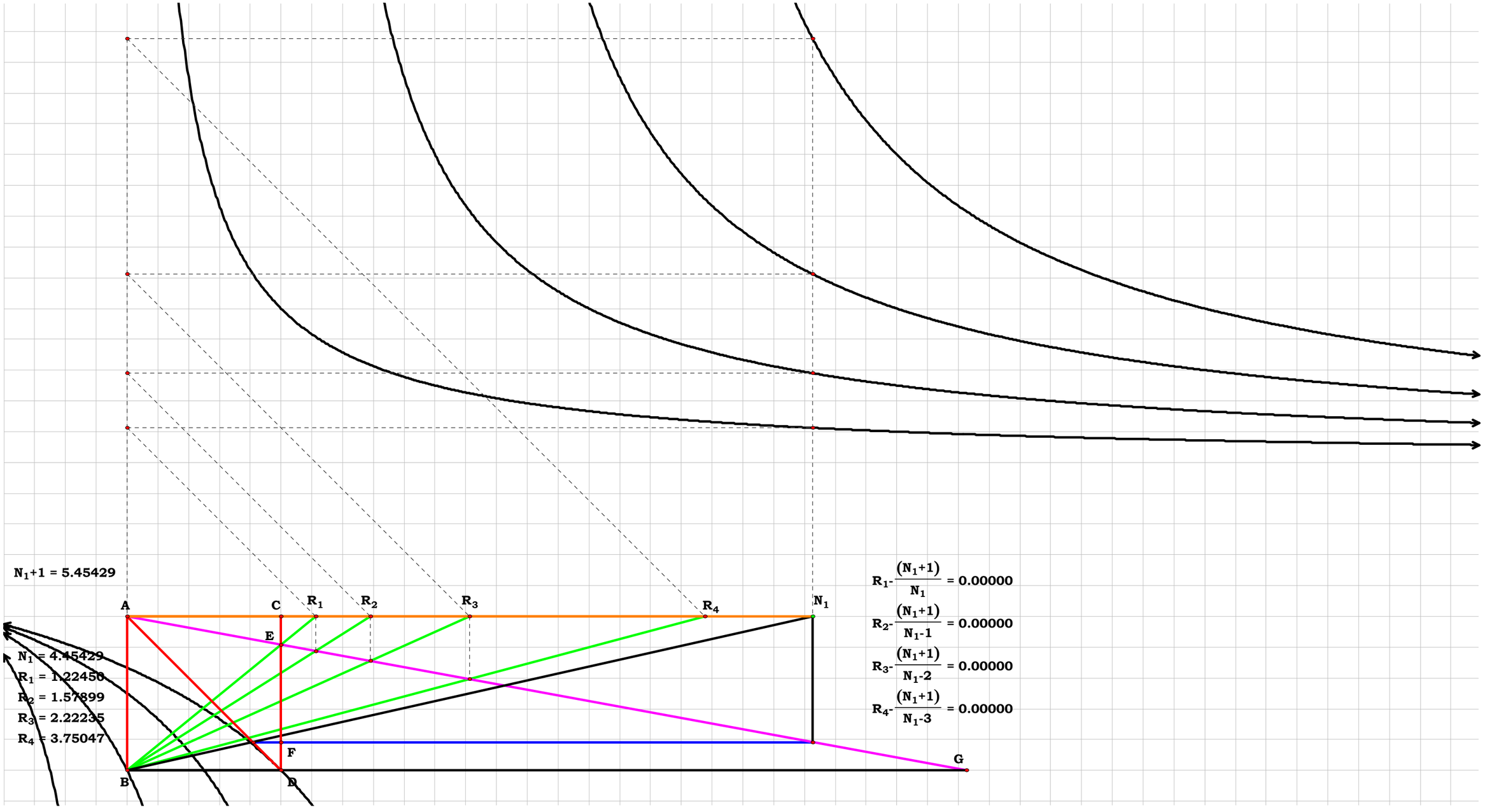
$$\frac{N_1}{N_1 + 1} = 0.833333 \qquad S_4 + \frac{N_1}{N_1 + 1} - N_1 = 0$$

Figure 6.

$$MN := R_1 \cdot HJ \qquad a_1 := 1 - \frac{1 - MN}{MN} \qquad \frac{Index}{N_1 + 1} \qquad a_1 = 0.166667$$

$$\frac{1}{N_1 + 1} = 0.166667 \qquad \frac{3}{N_1 + 1} = 0.5 \qquad \frac{1}{a_1} = 6$$

$$\frac{2}{N_1 + 1} = 0.333333 \qquad \frac{4}{N_1 + 1} = 0.666667$$


N1+1 = 5.45429
A
C
R1
R2
R3
R4
N1
E
F
G
B
D
N1 = 4.45429
R1 = 1.22458
R2 = 1.57899
R3 = 2.22235
R4 = 3.75047
R1-(N1+1)/N1 = 0.00000
R2-(N1+1)/N1-1 = 0.00000
R3-(N1+1)/N1-2 = 0.00000
R4-(N1+1)/N1-3 = 0.00000

$AB := 1$

$N_1 := 5$

Figure 7, 8 and 9.

Figure 7

$$DF := \frac{1}{N_1^2 + 1} \qquad BG := \frac{N_1}{1 - DF} \qquad CE := \frac{1}{BG}$$

$$R_1 := \frac{1}{1 - CE} \qquad R_1 - \frac{N_1^2 + 1}{N_1^2 - N_1 + 1} = 0$$

$$\frac{N_1^2 + 1}{N_1^2 + 1 - Index \cdot N_1}$$

$$\frac{N_1^2 + 1}{N_1^2 + 1 - 2 \cdot N_1} = 1.625$$

$$\frac{N_1^2 + 1}{N_1^2 + 1 - 3 \cdot N_1} = 2.363636$$

$$\frac{N_1^2 + 1}{N_1^2 + 1 - 4 \cdot N_1} = 4.333333$$

$N_1 = 5.00000$
$R_1 = 1.23810$
$R_2 = 1.62500$
$R_3 = 2.36364$
$R_4 = 4.33333$

$S_1 = 1.15385$
$S_2 = 2.11538$
$S_3 = 3.07692$
$S_4 = 4.03846$

$a_1 = 0.19231$
$a_2 = 0.38462$
$a_3 = 0.57692$
$a_4 = 0.76923$

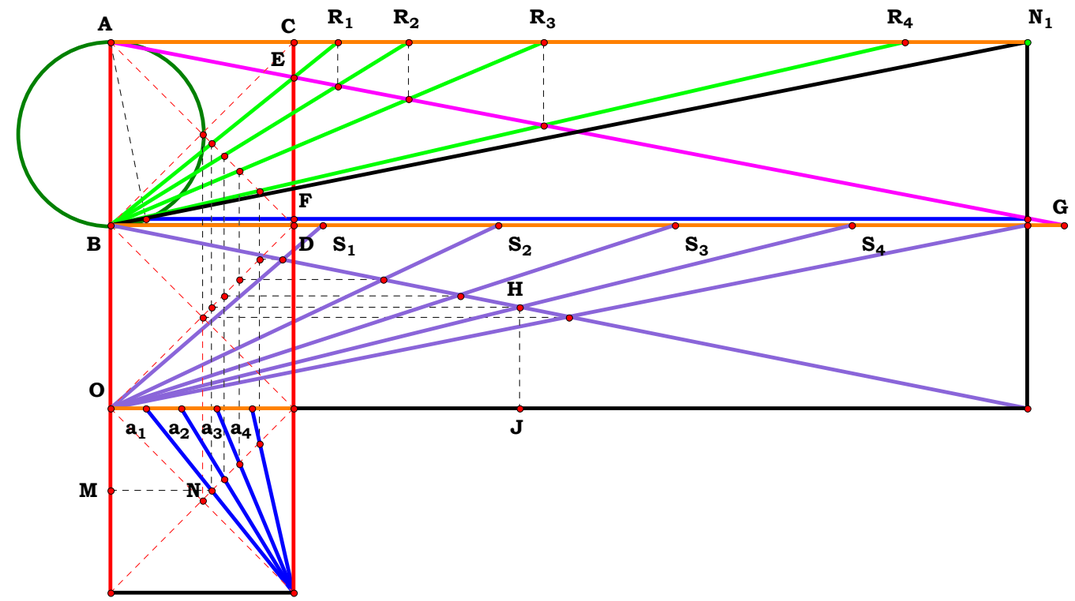


Figure 8.

$$HJ := \frac{1}{R_1 + 1} \qquad JO := N_1 \cdot HJ \qquad S_4 := \frac{JO}{1 - HJ} \qquad S_4 - \frac{N_1}{R_1} = 0 \qquad S_4 = 4.038462$$

$$\frac{N_1^3 + N_1 - Index \cdot N_1^2}{N_1^2 + 1}$$

$$\frac{N_1^3 + N_1 - 1 \cdot N_1^2}{N_1^2 + 1} = 4.038462$$

$$\frac{N_1^3 + N_1 - 2 \cdot N_1^2}{N_1^2 + 1} = 3.076923$$

$$\frac{N_1^3 + N_1 - 3 \cdot N_1^2}{N_1^2 + 1} = 2.115385$$

$$\frac{N_1^3 + N_1 - 4 \cdot N_1^2}{N_1^2 + 1} = 1.153846$$

Interval between consecutive S sub x's.

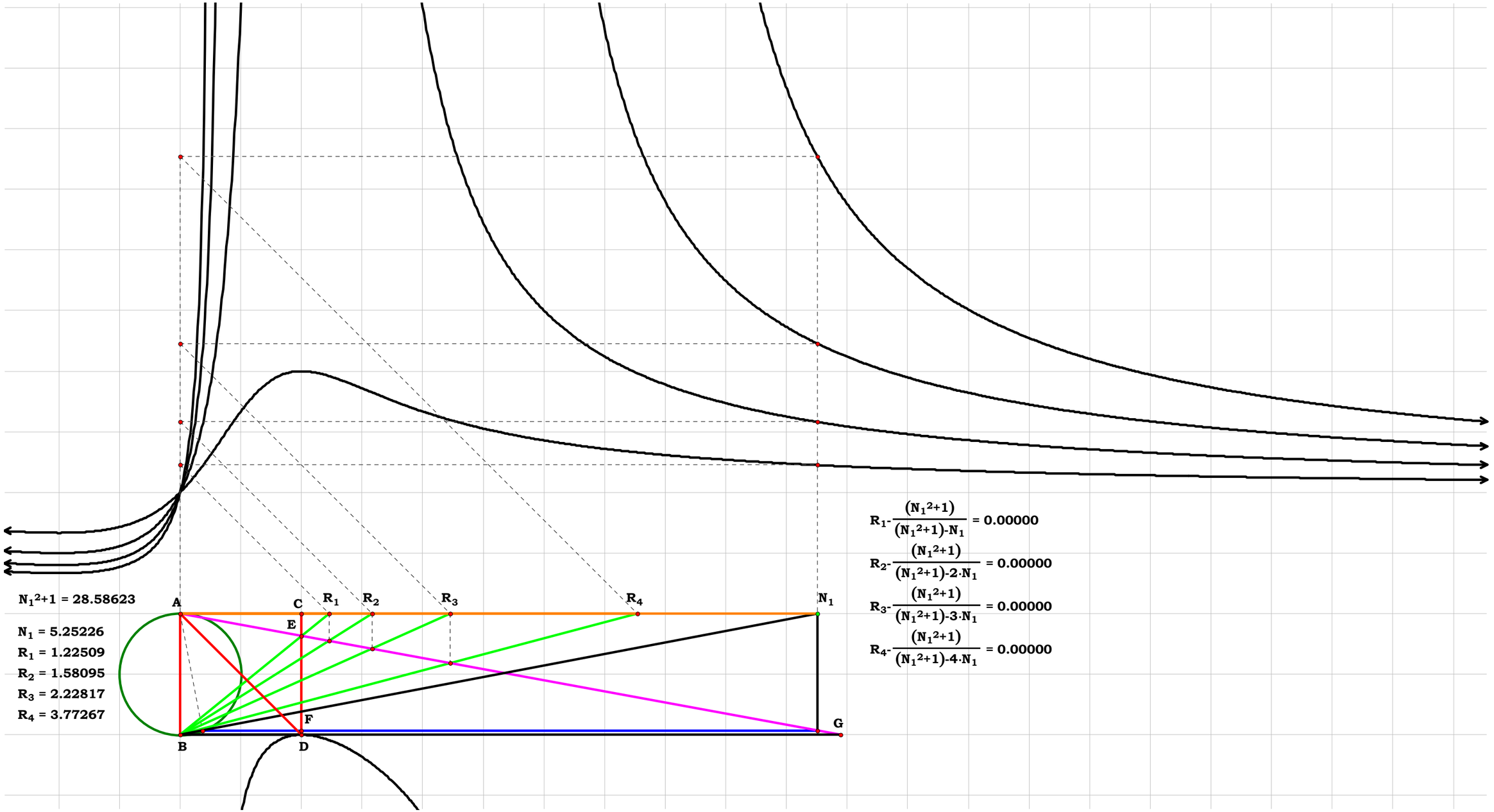
$$\frac{N_1^2}{N_1^2 + 1} = 0.961538 \qquad S_4 + \frac{N_1^2}{N_1^2 + 1} - N_1 = 0$$

Figure 9.

$$MN := R_1 \cdot HJ \qquad a_1 := 1 - \frac{1 - MN}{MN} \qquad \frac{Index \cdot N_1}{N_1^2 + 1} \qquad a_1 = 0.192308$$

$$\frac{1 \cdot N_1}{N_1^2 + 1} = 0.192308 \qquad \frac{3 \cdot N_1}{N_1^2 + 1} = 0.576923 \qquad \frac{1}{a_1} = 5.2$$

$$\frac{2 \cdot N_1}{N_1^2 + 1} = 0.384615 \qquad \frac{4 \cdot N_1}{N_1^2 + 1} = 0.769231$$



$N_1^2+1 = 28.58623$

$N_1 = 5.25226$

$R_1 = 1.22509$

$R_2 = 1.58095$

$R_3 = 2.22817$

$R_4 = 3.77267$

$$R_1\text{-}\frac{(N_1^2+1)}{(N_1^2+1)-N_1} = 0.00000$$

$$R_2\text{-}\frac{(N_1^2+1)}{(N_1^2+1)-2\cdot N_1} = 0.00000$$

$$R_3\text{-}\frac{(N_1^2+1)}{(N_1^2+1)-3\cdot N_1} = 0.00000$$

$$R_4\text{-}\frac{(N_1^2+1)}{(N_1^2+1)-4\cdot N_1} = 0.00000$$

Conclusion of the 9 plate series.

It goes without saying that I never demonstrate all of the possible constructions in most of my work. That is not the job of presenting a Tour de Force in Philosophy. A Tour de Force presents a method of complete induction, not a complete set of individual results, which is factually impossible. The argument that a Tour de Force is impossible because someone did not mention some particular item is fallacious; it is like saying that someone did not teach mathematics because they never mentioned some particular number. That argument works only on someone who is not overly bright, everyone starts thinking using enumeration, one either evolves to thinking in terms of definition, or they do not. When they do not, they are condemned to a life of contradiction. How would you discern the difference between heaven and hell?

A grammar book, founded upon the unit concept of a thing, is itself an example of a Tour de Force in Philosophy. Factually, there is only one Tour de Force in Philosophy possible, and it was mentioned a very long time ago.

What does the parable of, If thy eye be single, your whole body would be full of light mean? Does it not mean, that there is but one and only one standard that psychology is based on? That is a biological fact.

$\frac{N_1}{b_1} = 5.20000$

$\frac{N_1}{b_2} = 4.40000$

$\frac{N_1}{b_3} = 3.60000$

$\frac{N_1}{b_4} = 2.80000$

$\frac{N_1}{R_1} = 4.20000$

$\frac{N_1}{R_2} = 3.40000$

$\frac{N_1}{R_3} = 2.60000$

$\frac{N_1}{R_4} = 1.80000$

$\frac{N_1}{S_1} = 2.77778$

$\frac{N_1}{S_2} = 1.92308$

$\frac{N_1}{S_3} = 1.47059$

$\frac{N_1}{S_4} = 1.19048$

$\frac{N_1}{a_1} = 31.25000$

$\frac{N_1}{a_2} = 15.62500$

$\frac{N_1}{a_3} = 10.41667$

$\frac{N_1}{a_4} = 7.81250$

$b_1 = 0.96154$

$b_2 = 1.13636$

$b_3 = 1.38889$

$b_4 = 1.78571$

$N_1 = 5.00000$

$R_1 = 1.19048$

$R_2 = 1.47059$

$R_3 = 1.92308$

$R_4 = 2.77778$

$S_1 = 1.80000$

$S_2 = 2.60000$

$S_3 = 3.40000$

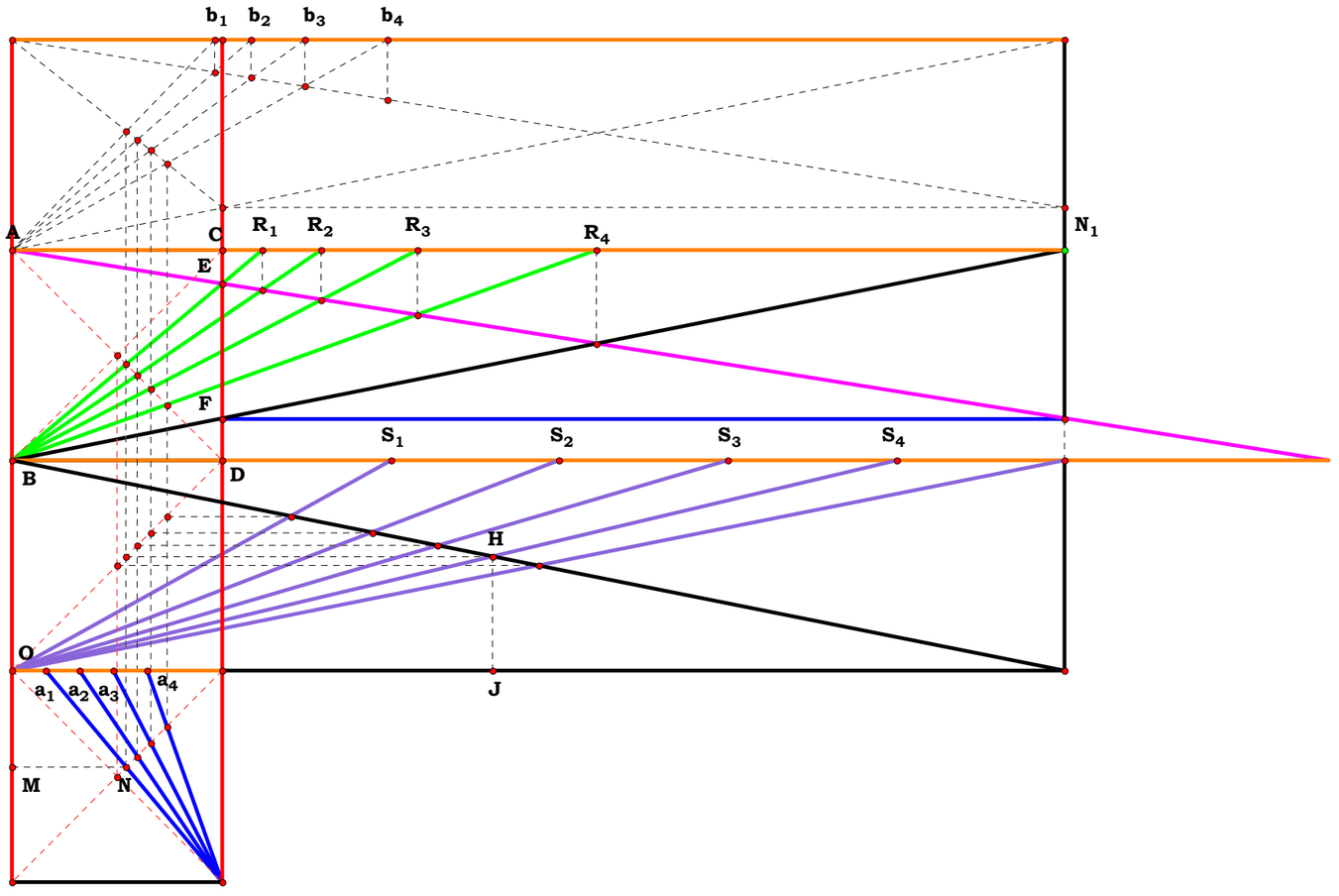
$S_4 = 4.20000$

$a_1 = 0.16000$

$a_2 = 0.32000$

$a_3 = 0.48000$

$a_4 = 0.64000$



$AB := 1$

$N_1 := 4.76977$

$N_2 := 3.17324$

$N_3 := .56832$

Fractional Series Introduction 3

$$R_4 := \frac{N_1}{N_2} \qquad AO := 1 + N_3 \qquad EH := \frac{N_1 - R_4}{N_1}$$

$$R_5 := \frac{AO \cdot R_4}{EH + N_3} \qquad R_6 := \frac{AO \cdot R_5}{\frac{N_1 - R_5}{N_1} + N_3}$$

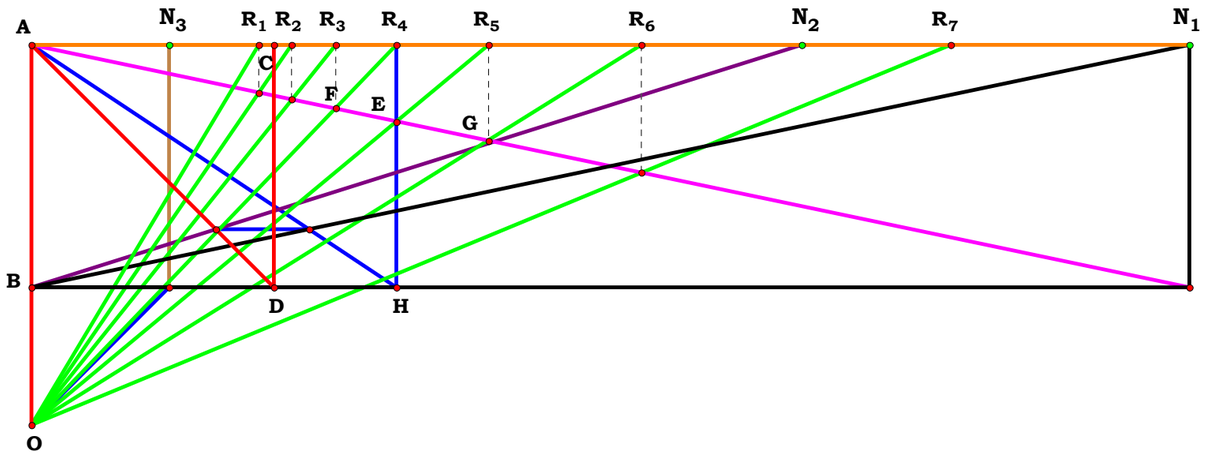
$$R_4 - \frac{N_1 \cdot (N_3 + 1)}{N_2 + N_2 \cdot N_3} = 0 \qquad R_5 - \frac{N_1 \cdot (N_3 + 1)}{N_2 + N_2 \cdot N_3 - 1} = 0$$

$$R_6 - \frac{N_1 \cdot (N_3 + 1)}{N_2 + N_2 \cdot N_3 - 2} = 0 \qquad \frac{N_1 \cdot (N_3 + 1)}{N_2 + N_2 \cdot N_3 + 1} = 1.251624$$

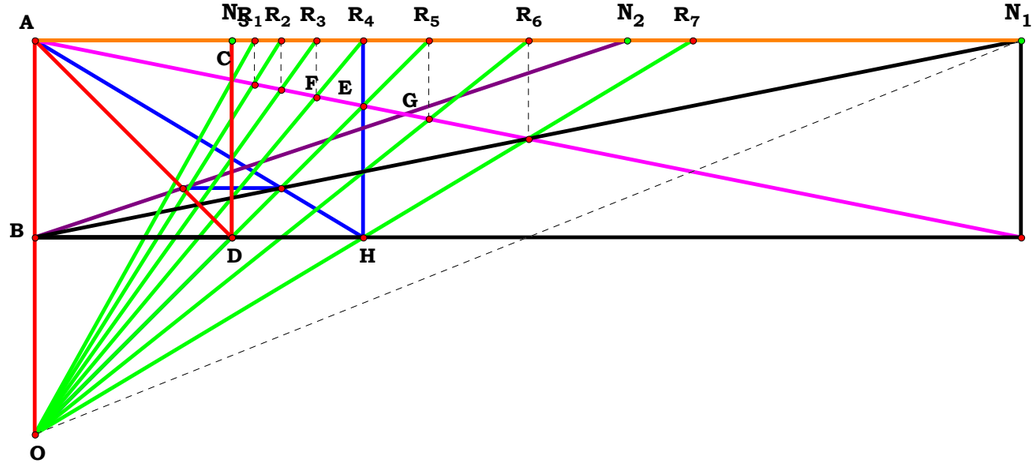
$$\frac{N_1 \cdot (N_3 + 1)}{N_2 + N_2 \cdot N_3 + 2} = 1.072222 \qquad \frac{N_1 \cdot (N_3 + 1)}{N_2 + N_2 \cdot N_3 + 3} = 0.937802$$

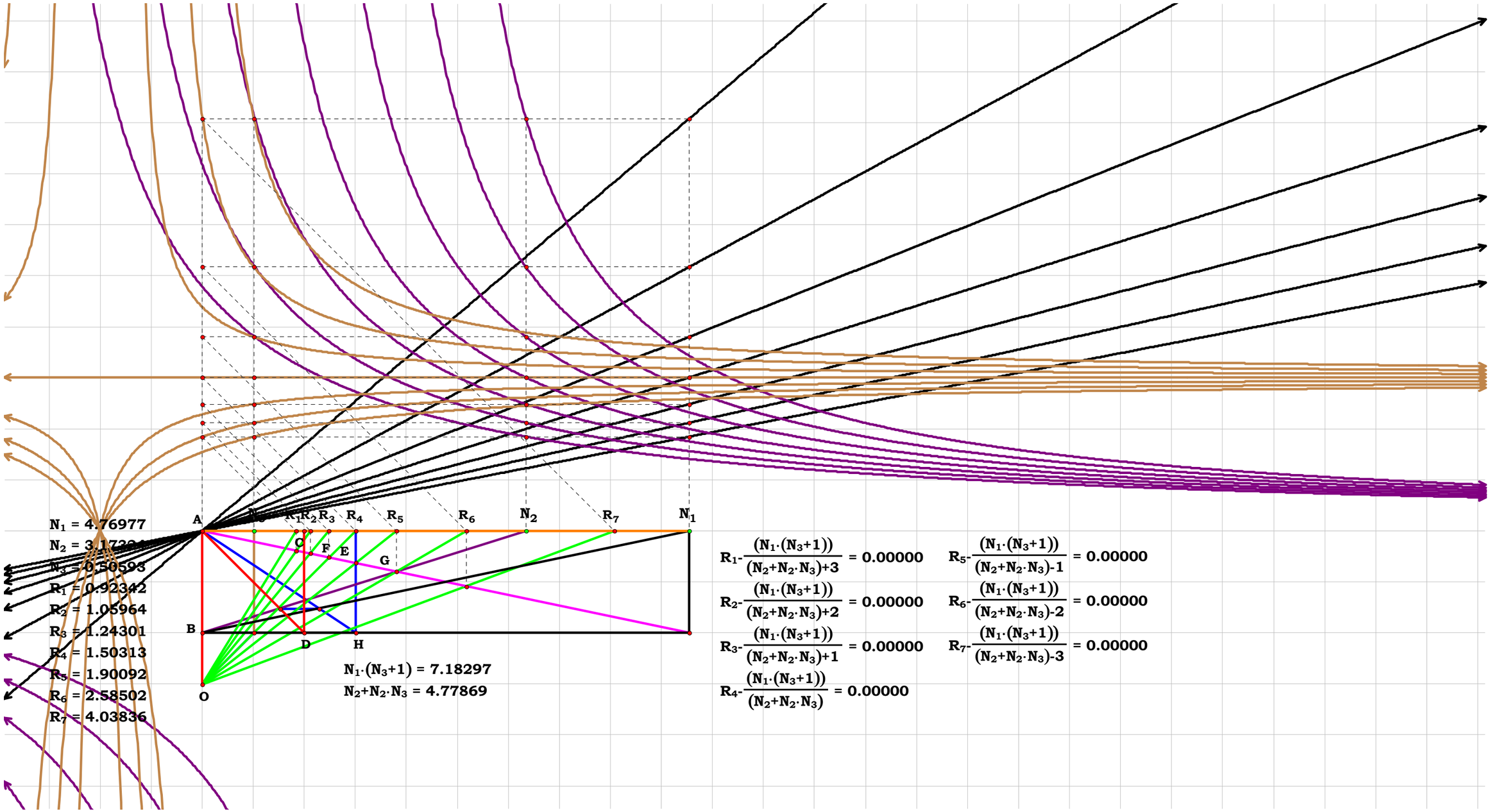
$$\frac{N_1 \cdot (N_3 + 1)}{N_2 + N_2 \cdot N_3 - 3} = 3.784435 \qquad \frac{N_1 \cdot (N_3 + 1)}{N_2 + N_2 \cdot N_3 - \text{Index}}$$

$N_1 = 4.76977$
$N_2 = 3.17324$
$N_3 = 0.56832$
$R_1 = 0.93780$
$R_2 = 1.07222$
$R_3 = 1.25163$
$R_4 = 1.50313$
$R_5 = 1.88112$
$R_6 = 2.51308$
$R_7 = 3.78447$



$N_1 = 5.00000$
$N_2 = 3.00000$
$N_3 = 1.00000$
$R_1 = 1.11111$
$R_2 = 1.25000$
$R_3 = 1.42857$
$R_4 = 1.66667$
$R_5 = 2.00000$
$R_6 = 2.50000$
$R_7 = 3.33333$





N1 = 4.76977
N2 = 3.17394
N3 = 0.50593
R1 = 0.92342
R2 = 1.05964
R3 = 1.24301
R4 = 1.50313
R5 = 1.90092
R6 = 2.58502
R7 = 4.03836
A
B
C
D
E
F
G
H
O
N1
N2
R1
R2
R3
R4
R5
R6
R7
N1·(N3+1) = 7.18297
N2+N2·N3 = 4.77869
R1-(N1·(N3+1))/((N2+N2·N3)+3) = 0.00000
R2-(N1·(N3+1))/((N2+N2·N3)+2) = 0.00000
R3-(N1·(N3+1))/((N2+N2·N3)+1) = 0.00000
R4-(N1·(N3+1))/((N2+N2·N3)) = 0.00000
R5-(N1·(N3+1))/((N2+N2·N3)-1) = 0.00000
R6-(N1·(N3+1))/((N2+N2·N3)-2) = 0.00000
R7-(N1·(N3+1))/((N2+N2·N3)-3) = 0.00000

$AB := 1$

$N_1 := 3.81433$

$N_2 := 6$

Fractional Series Introduction 4

$$DE := \frac{1}{N_1} \quad BF := \frac{N_2}{1 - DE} \quad CG := \frac{1}{BF}$$

$$R_1 := \frac{1}{1 - CG}$$

$$R_1 - \frac{N_1 \cdot N_2}{N_1 \cdot N_2 - (N_1 - 1)} = 0$$

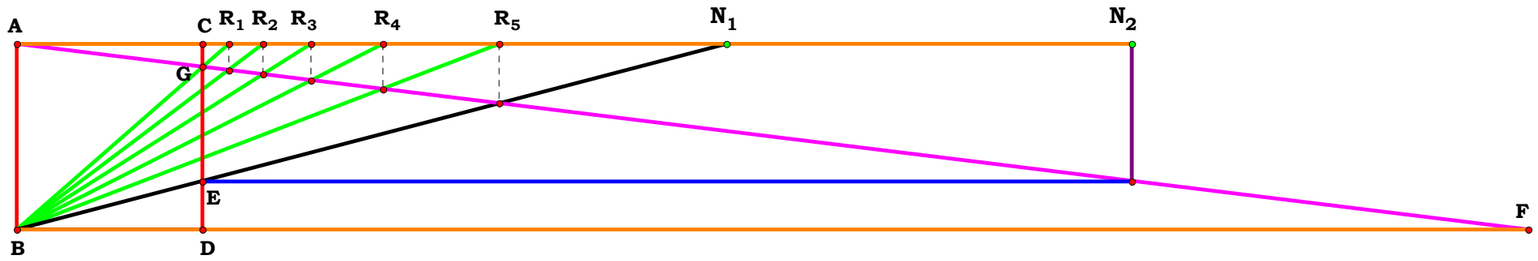
$$\frac{N_1 \cdot N_2}{N_1 \cdot N_2 - \text{Index} \cdot (N_1 - 1)}$$

$$\frac{N_1 \cdot N_2}{N_1 \cdot N_2 - (N_1 - 1) \cdot 2} = 1.326161$$

$$\frac{N_1 \cdot N_2}{N_1 \cdot N_2 - (N_1 - 1) \cdot 3} = 1.584574$$

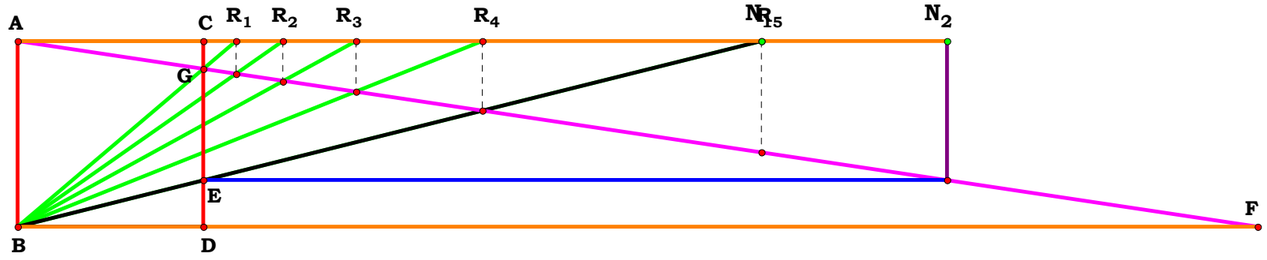
$$\frac{N_1 \cdot N_2}{N_1 \cdot N_2 - (N_1 - 1) \cdot 4} = 1.968067$$

$$\frac{N_1 \cdot N_2}{N_1 \cdot N_2 - (N_1 - 1) \cdot 5} = 2.596451$$



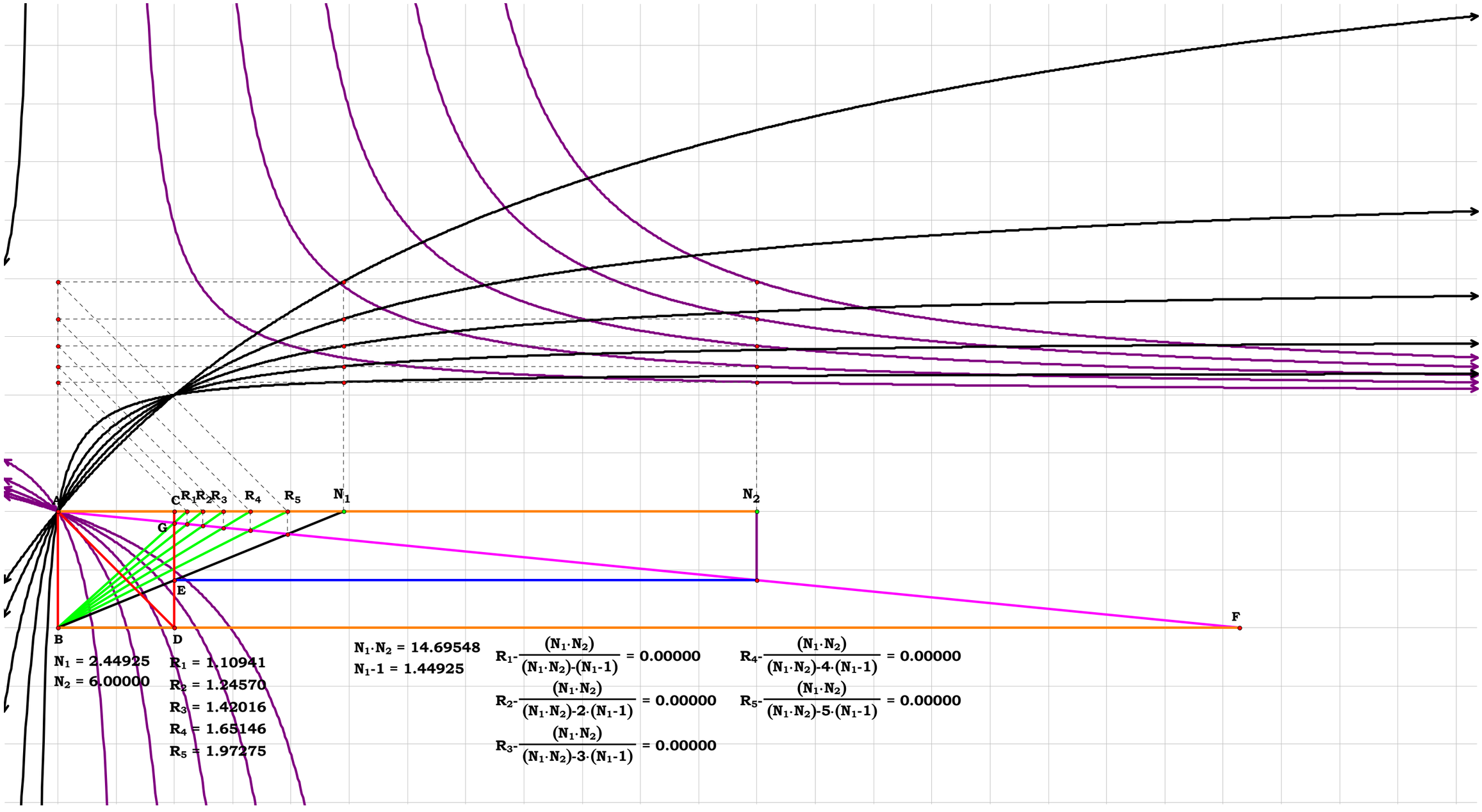
$N_1 = 3.81433$
$N_2 = 6.00000$

$R_1 = 1.14021$
$R_2 = 1.32616$
$R_3 = 1.58457$
$R_4 = 1.96807$
$R_5 = 2.59645$



$N_1 = 4.00000$
$N_2 = 5.00000$

$R_1 = 1.17647$
$R_2 = 1.42857$
$R_3 = 1.81818$
$R_4 = 2.50000$
$R_5 = 4.00000$



$N_1 = 2.44925$

$N_2 = 6.00000$

$R_1 = 1.10941$

$R_2 = 1.24570$

$R_3 = 1.42016$

$R_4 = 1.65146$

$R_5 = 1.97275$

$N_1 \cdot N_2 = 14.69548$

$N_1 - 1 = 1.44925$

$$R_1 - \frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - (N_1 - 1)} = 0.00000$$

$$R_2 - \frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 2 \cdot (N_1 - 1)} = 0.00000$$

$$R_3 - \frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 3 \cdot (N_1 - 1)} = 0.00000$$

$$R_4 - \frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 4 \cdot (N_1 - 1)} = 0.00000$$

$$R_5 - \frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2) - 5 \cdot (N_1 - 1)} = 0.00000$$

$AB := 1$

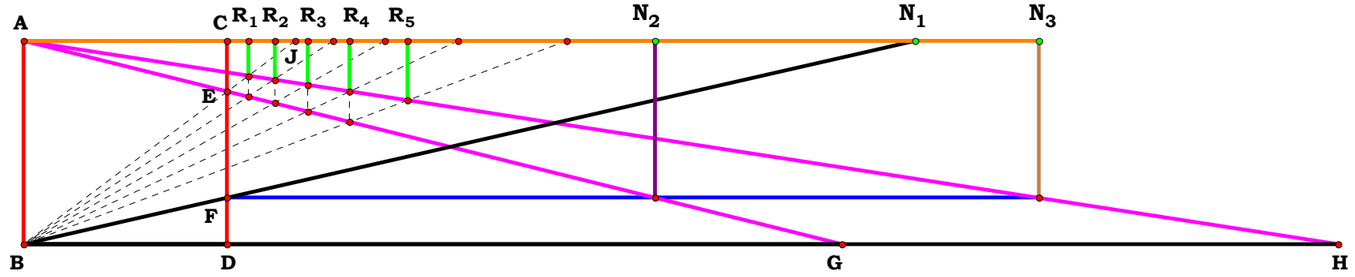
$N_1 := 4.37776$

$N_2 := 3.10140$

$N_3 := 4.98355$

Fractional Series Introduction 5

$N_1 = 4.37776$
$N_2 = 3.10140$
$N_3 = 4.98355$
$R_1 = 1.10370$
$R_2 = 1.23140$
$R_3 = 1.39252$
$R_4 = 1.60214$
$R_5 = 1.88605$



$$DF := \frac{1}{N_1} \qquad BG := \frac{N_2}{1 - DF} \qquad BH := \frac{N_3}{1 - DF}$$

$$CE := \frac{1}{BG} \qquad AJ := \frac{1}{1 - CE} \qquad R_1 := \frac{BH \cdot AJ}{BH + AJ}$$

$$R_1 - \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 + (N_1 - 1) \cdot (N_2 - N_3)} = 0$$

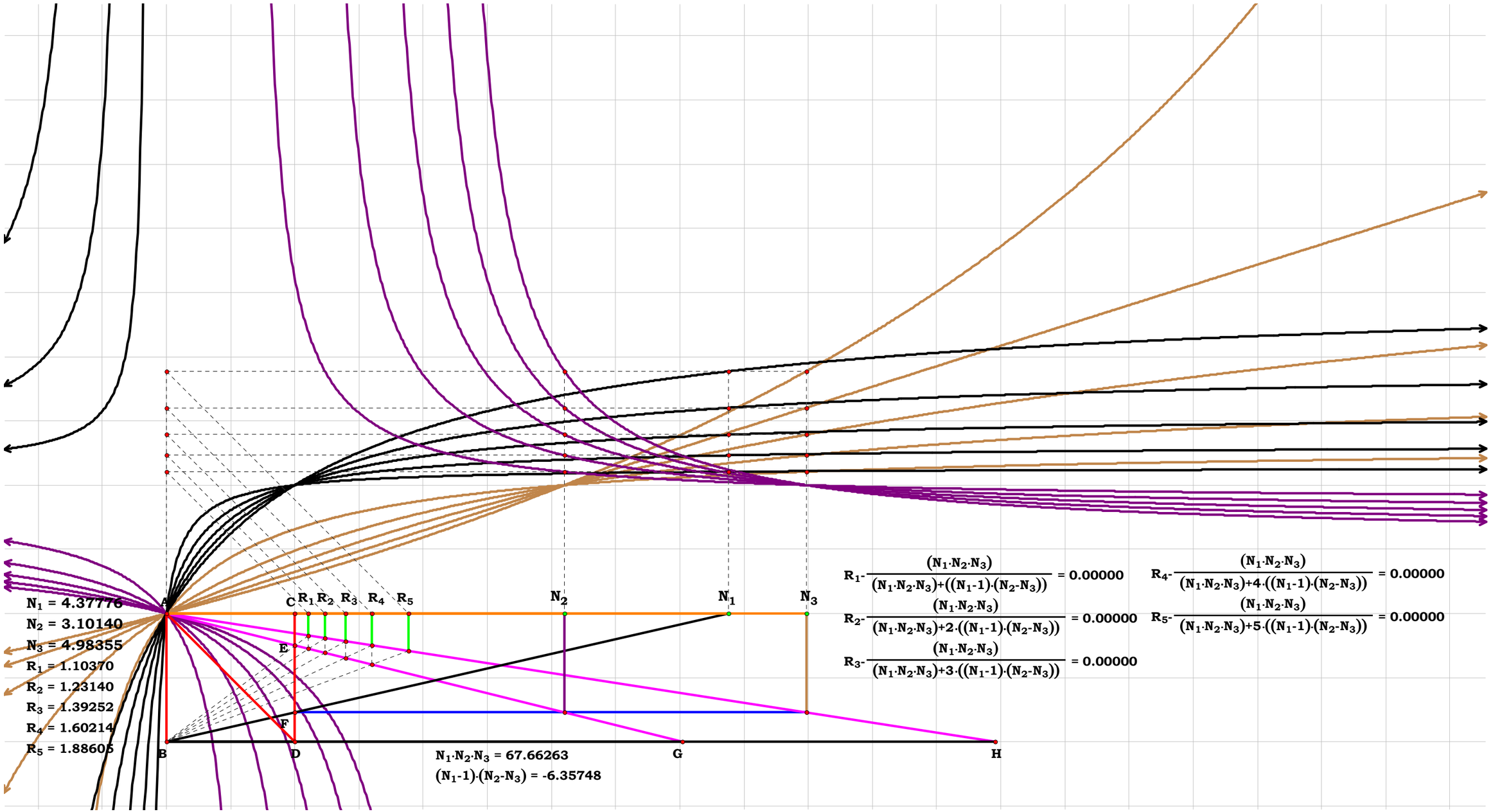
$$\frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 + Index \cdot (N_1 - 1) \cdot (N_2 - N_3)}$$

$$\frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 + 2 \cdot (N_1 - 1) \cdot (N_2 - N_3)} = 1.2314$$

$$\frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 + 3 \cdot (N_1 - 1) \cdot (N_2 - N_3)} = 1.392514$$

$$\frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 + 4 \cdot (N_1 - 1) \cdot (N_2 - N_3)} = 1.602134$$

$$\frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 + 5 \cdot (N_1 - 1) \cdot (N_2 - N_3)} = 1.886048$$


N1 = 4.37776
N2 = 3.10140
N3 = 4.98355
R1 = 1.10370
R2 = 1.23140
R3 = 1.39252
R4 = 1.60214
R5 = 1.88605
A
B
C
D
E
F
G
H
R1 R2 R3 R4 R5
N2
N1
N3
N1·N2·N3 = 67.66263
(N1-1)·(N2-N3) = -6.35748
R1- (N1·N2·N3)/((N1·N2·N3)+((N1-1)·(N2-N3))) = 0.00000
R2- (N1·N2·N3)/((N1·N2·N3)+2·((N1-1)·(N2-N3))) = 0.00000
R3- (N1·N2·N3)/((N1·N2·N3)+3·((N1-1)·(N2-N3))) = 0.00000
R4- (N1·N2·N3)/((N1·N2·N3)+4·((N1-1)·(N2-N3))) = 0.00000
R5- (N1·N2·N3)/((N1·N2·N3)+5·((N1-1)·(N2-N3))) = 0.00000

Fractional Series Book 1 1

$AB := 1$

$N_1 := 2.87497$

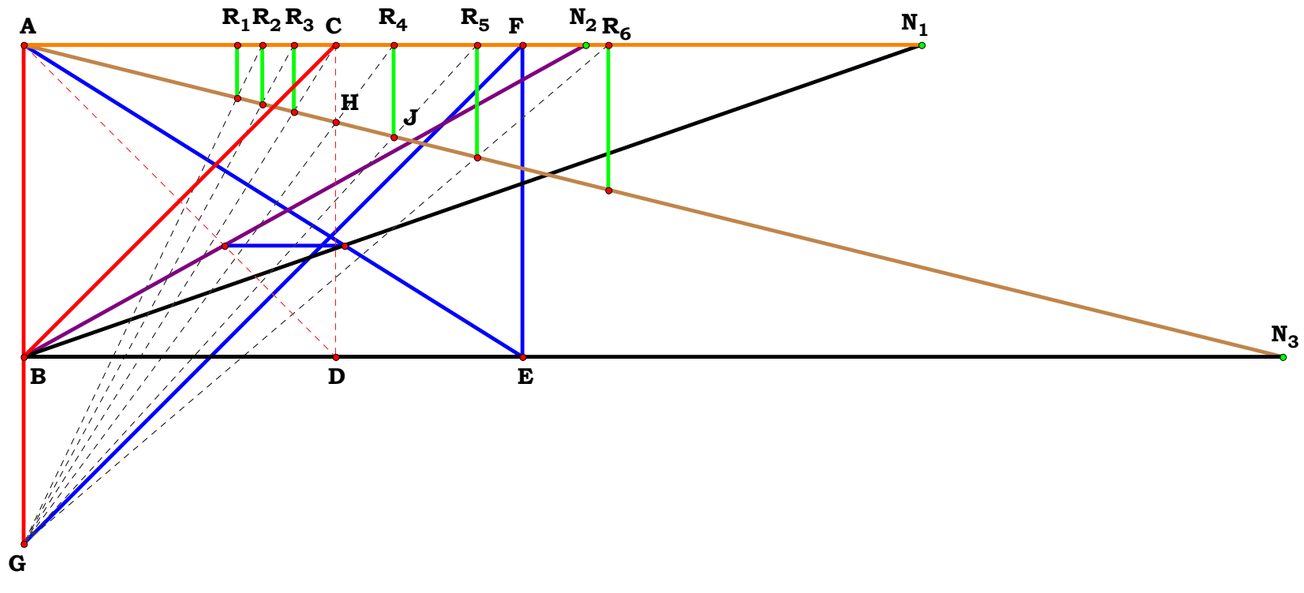
$N_2 := 1.79901$

$N_3 := 4.03249$

$N_1 = 2.87497$
$N_2 = 1.79901$
$N_3 = 4.03249$
$R_1 = 0.68235$
$R_2 = 0.76315$
$R_3 = 0.86567$
$R_4 = 1.18368$
$R_5 = 1.45002$
$R_6 = 1.87102$

$$AF := \frac{N_1}{N_2} \qquad CH := \frac{1}{N_3} \qquad AG := AF$$

$$R_4 := \frac{AG}{AG - CH} \qquad JR_4 := \frac{R_4}{N_3} \qquad R_5 := \frac{AG \cdot R_4}{AG - JR_4}$$



One can walk each value down, however, these three iterations produce:

$$AB - \frac{N_1 \cdot N_3}{N_1 \cdot N_3} = 0 \qquad R_4 - \frac{N_1 \cdot N_3}{N_1 \cdot N_3 - N_2} = 0 \qquad R_5 - \frac{N_1 \cdot N_3}{N_1 \cdot N_3 - 2 \cdot N_2} = 0$$

giving a sequence:

$$\frac{N_1 \cdot N_3}{N_1 \cdot N_3 - N_2 \cdot Index} \qquad R_1 := \frac{N_1 \cdot N_3}{N_1 \cdot N_3 - N_2 \cdot -3}$$

$$R_2 := \frac{N_1 \cdot N_3}{N_1 \cdot N_3 - N_2 \cdot -2} \qquad R_3 := \frac{N_1 \cdot N_3}{N_1 \cdot N_3 - N_2 \cdot -1}$$

$$AB - \frac{N_1 \cdot N_3}{N_1 \cdot N_3} = 0 \qquad R_4 - \frac{N_1 \cdot N_3}{N_1 \cdot N_3 - N_2} = 0$$

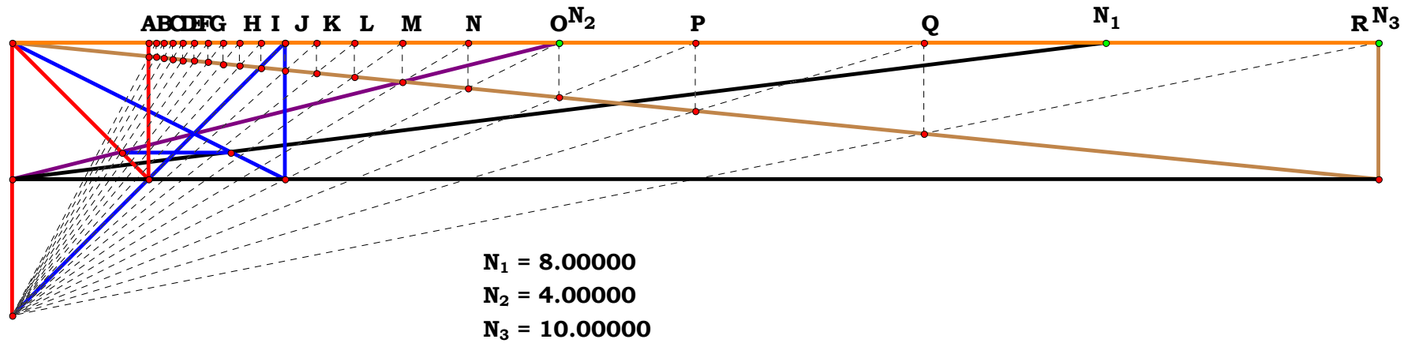
$$R_5 - \frac{N_1 \cdot N_3}{N_1 \cdot N_3 - N_2 \cdot 2} = 0 \qquad R_6 := \frac{N_1 \cdot N_3}{N_1 \cdot N_3 - N_2 \cdot 3}$$

$R_1 = 0.682347$ $R_4 = 1.18368$

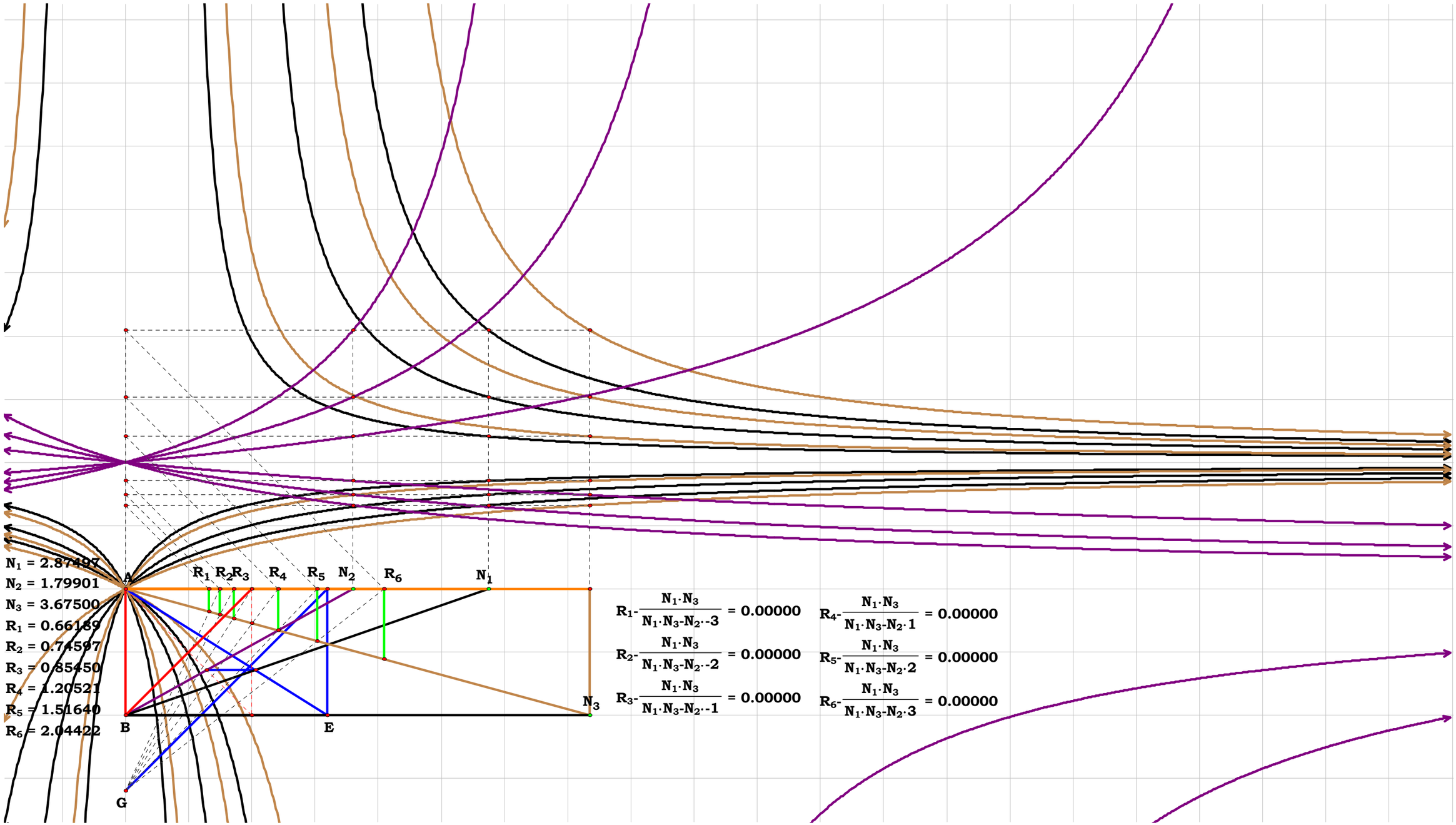
$R_2 = 0.763153$ $R_4 = 1.18368$

$R_3 = 0.865668$ $R_6 = 1.871014$

A = 1.05263
B = 1.11111
C = 1.17647
D = 1.25000
E = 1.33333
F = 1.42857
G = 1.53846
H = 1.66667
I = 1.81818
J = 2.00000
K = 2.22222
L = 2.50000
M = 2.85714
N = 3.33333
O = 4.00000
P = 5.00000
Q = 6.66667
R = 10.00000



$N_1 = 8.00000$
$N_2 = 4.00000$
$N_3 = 10.00000$


N1 = 2.87497
N2 = 1.79901
N3 = 3.67500
R1 = 0.66189
R2 = 0.74597
R3 = 0.85450
R4 = 1.20521
R5 = 1.51640
R6 = 2.04422
A
B
E
G
R1 R2 R3 R4 R5 N2 R6 N1
N3
R1- N1·N3 / N1·N3-N2·-3 = 0.00000
R2- N1·N3 / N1·N3-N2·-2 = 0.00000
R3- N1·N3 / N1·N3-N2·-1 = 0.00000
R4- N1·N3 / N1·N3-N2·1 = 0.00000
R5- N1·N3 / N1·N3-N2·2 = 0.00000
R6- N1·N3 / N1·N3-N2·3 = 0.00000

$AB := 1$

$N_1 := 1.73988$

$N_2 := 2.18406$

$N_3 := 3.49697$

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$DE := \frac{1}{N_3}$ $BK := \frac{N_2}{1 - DE}$ $CF := \frac{1}{BK}$

$R_4 := \frac{N_1}{N_1 - CF}$ $GR_4 := \frac{R_4 \cdot (N_3 - 1)}{N_2 \cdot N_3}$ $R_5 := \frac{N_1 \cdot R_4}{N_1 - GR_4}$

$CF - \frac{N_3 - 1}{N_2 \cdot N_3} = 0$

By interpolation gives:

$$\frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - Index \cdot (N_3 - 1)}$$

$$R_4 - \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - N_3 + 1} = 0$$

$$R_5 - \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - 2 \cdot N_3 + 2} = 0$$

$$R_1 := \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - (N_3 - 1) \cdot -3}$$

$$R_2 := \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - (N_3 - 1) \cdot -2}$$

$$R_3 := \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - (N_3 - 1) \cdot -1}$$

$$AB - \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - (N_3 - 1) \cdot 0} = 0$$

$$R_4 - \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - (N_3 - 1) \cdot 1} = 0$$

$$R_5 - \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - (N_3 - 1) \cdot 2} = 0$$

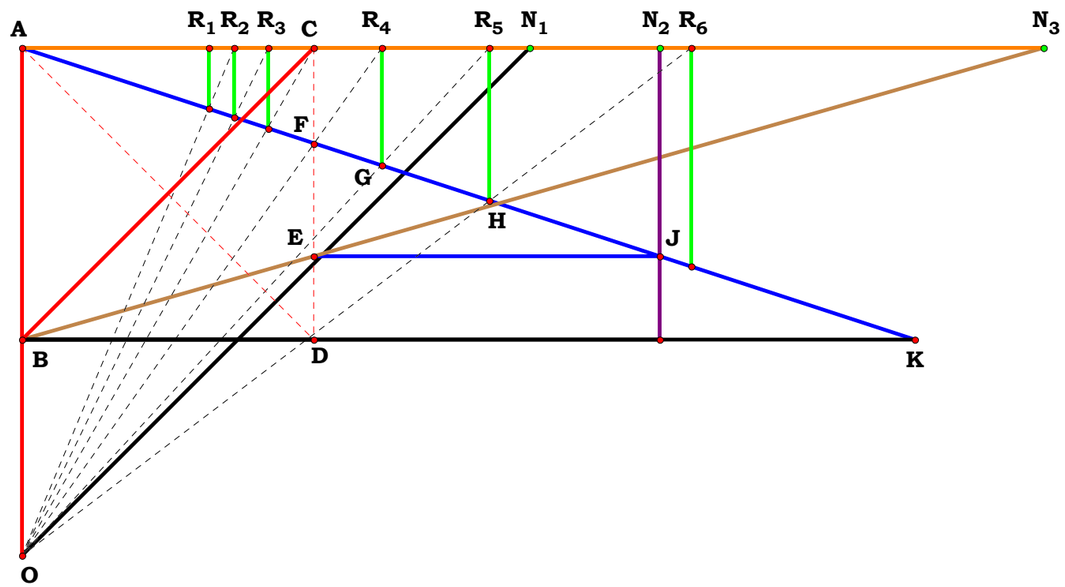
$$R_6 := \frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - (N_3 - 1) \cdot 3}$$

$R_1 = 0.639503$ $R_4 = 1.231383$

$R_2 = 0.726845$ $R_5 = 1.602075$

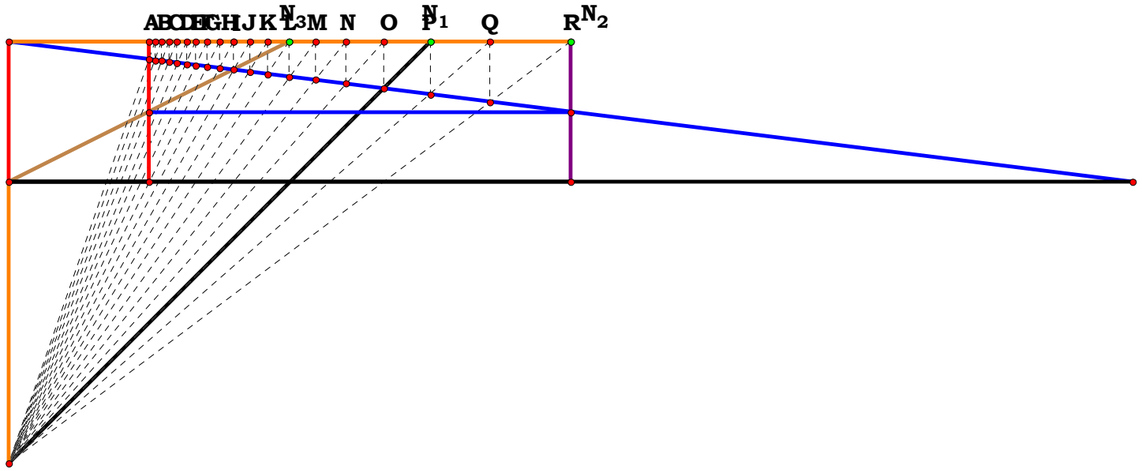
$R_3 = 0.841818$ $R_6 = 2.292074$

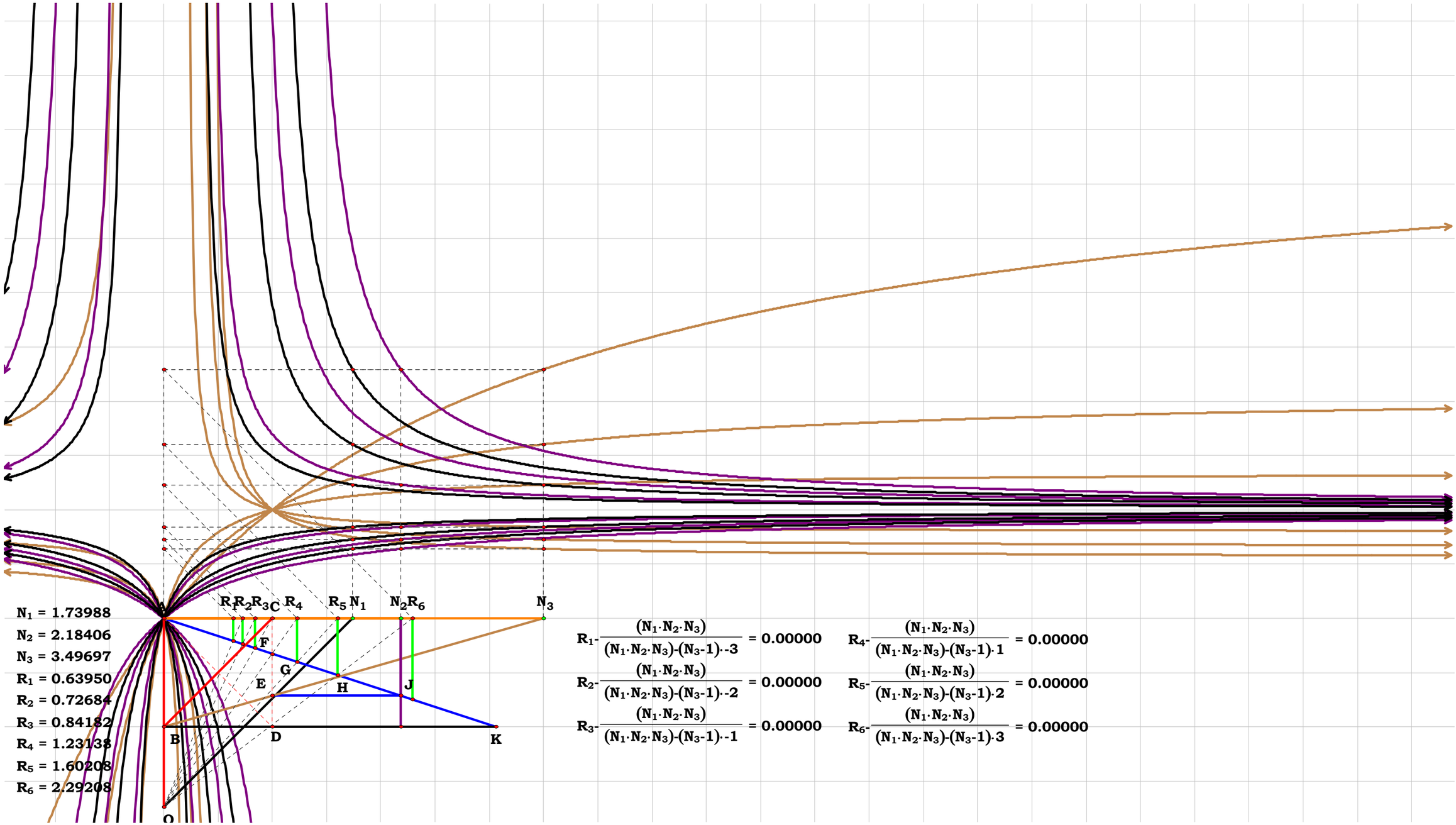
$N_1 = 1.73988$
$N_2 = 2.18406$
$N_3 = 3.49697$
$R_1 = 0.63950$
$R_2 = 0.72684$
$R_3 = 0.84182$
$R_4 = 1.23138$
$R_5 = 1.60208$
$R_6 = 2.29208$



A = 1.04348
B = 1.09091
C = 1.14286
D = 1.20000
E = 1.26316
F = 1.33333
G = 1.41176
H = 1.50000
I = 1.60000
J = 1.71429
K = 1.84615
L = 2.00000
M = 2.18182
N = 2.40000
O = 2.66667
P = 3.00000
Q = 3.42857
R = 4.00000

$N_1 = 3.00000$
$N_2 = 4.00000$
$N_3 = 2.00000$





$N_1 = 1.73988$

$N_2 = 2.18406$

$N_3 = 3.49697$

$R_1 = 0.63950$

$R_2 = 0.72684$

$R_3 = 0.84182$

$R_4 = 1.23138$

$R_5 = 1.60208$

$R_6 = 2.29208$

$$R_1\text{-}\frac{(N_1\cdot N_2\cdot N_3)}{(N_1\cdot N_2\cdot N_3)-(N_3-1)\cdot -3} = 0.00000 \qquad R_4\text{-}\frac{(N_1\cdot N_2\cdot N_3)}{(N_1\cdot N_2\cdot N_3)-(N_3-1)\cdot 1} = 0.00000$$

$$R_2\text{-}\frac{(N_1\cdot N_2\cdot N_3)}{(N_1\cdot N_2\cdot N_3)-(N_3-1)\cdot -2} = 0.00000 \qquad R_5\text{-}\frac{(N_1\cdot N_2\cdot N_3)}{(N_1\cdot N_2\cdot N_3)-(N_3-1)\cdot 2} = 0.00000$$

$$R_3\text{-}\frac{(N_1\cdot N_2\cdot N_3)}{(N_1\cdot N_2\cdot N_3)-(N_3-1)\cdot -1} = 0.00000 \qquad R_6\text{-}\frac{(N_1\cdot N_2\cdot N_3)}{(N_1\cdot N_2\cdot N_3)-(N_3-1)\cdot 3} = 0.00000$$

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$AB := 1$

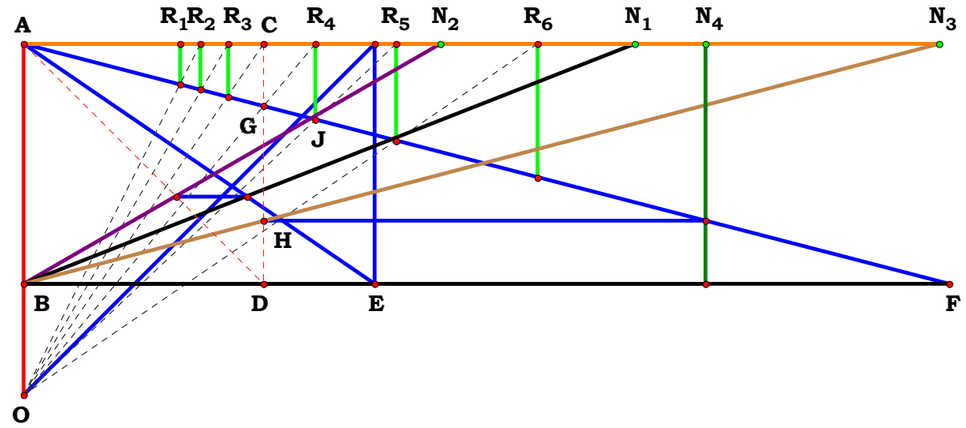
$N_1 := 2.54173$

$N_2 := 1.73712$

$N_3 := 3.81280$

$N_4 := 2.84066$

$N_1 = 2.54173$
$N_2 = 1.73712$
$N_3 = 3.81280$
$N_4 = 2.84066$
$R_1 = 0.65254$
$R_2 = 0.73802$
$R_5 = 0.84926$
$R_4 = 1.21579$
$R_5 = 1.55035$
$R_6 = 2.13892$



$BE := \frac{N_1}{N_2}$ $DH := \frac{1}{N_3}$ $BF := \frac{N_4}{1 - DH}$ $CG := \frac{1}{BF}$

$R_4 := \frac{BE}{BE - CG}$ $R_5 := \frac{BE}{BE - CG \cdot 2}$ $R_6 := \frac{BE}{BE - CG \cdot 3}$

$R_3 := \frac{BE}{BE - CG \cdot -1}$ $R_2 := \frac{BE}{BE - CG \cdot -2}$ $R_1 := \frac{BE}{BE - CG \cdot -3}$ $CG - \frac{N_3 - 1}{N_3 \cdot N_4} = 0$ $\frac{N_1 \cdot N_3 \cdot N_4}{Index \cdot (N_2 - N_2 \cdot N_3) + N_1 \cdot N_3 \cdot N_4}$

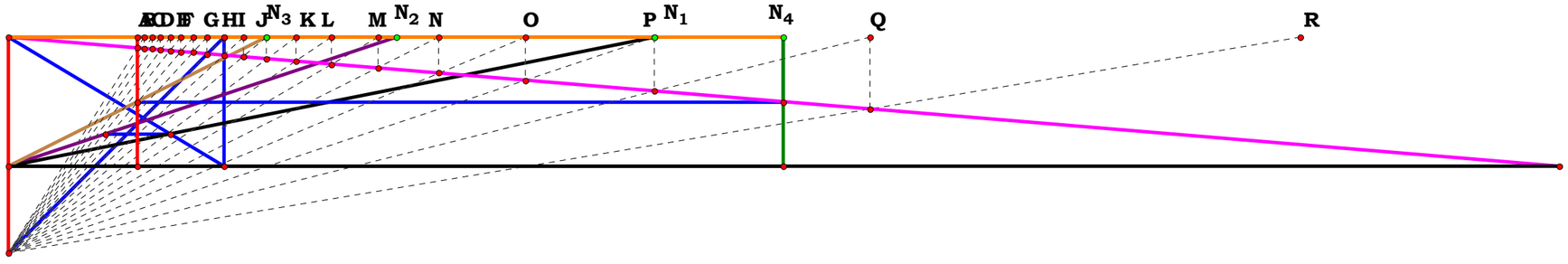
$R_4 - \frac{N_1 \cdot N_3 \cdot N_4}{N_2 - N_2 \cdot N_3 + N_1 \cdot N_3 \cdot N_4} = 0$ $R_5 - \frac{N_1 \cdot N_3 \cdot N_4}{2 \cdot (N_2 - N_2 \cdot N_3) + N_1 \cdot N_3 \cdot N_4} = 0$ $R_1 - \frac{N_1 \cdot N_3 \cdot N_4}{-3 \cdot (N_2 - N_2 \cdot N_3) + N_1 \cdot N_3 \cdot N_4} = 0$ $R_2 - \frac{N_1 \cdot N_3 \cdot N_4}{-2 \cdot (N_2 - N_2 \cdot N_3) + N_1 \cdot N_3 \cdot N_4} = 0$

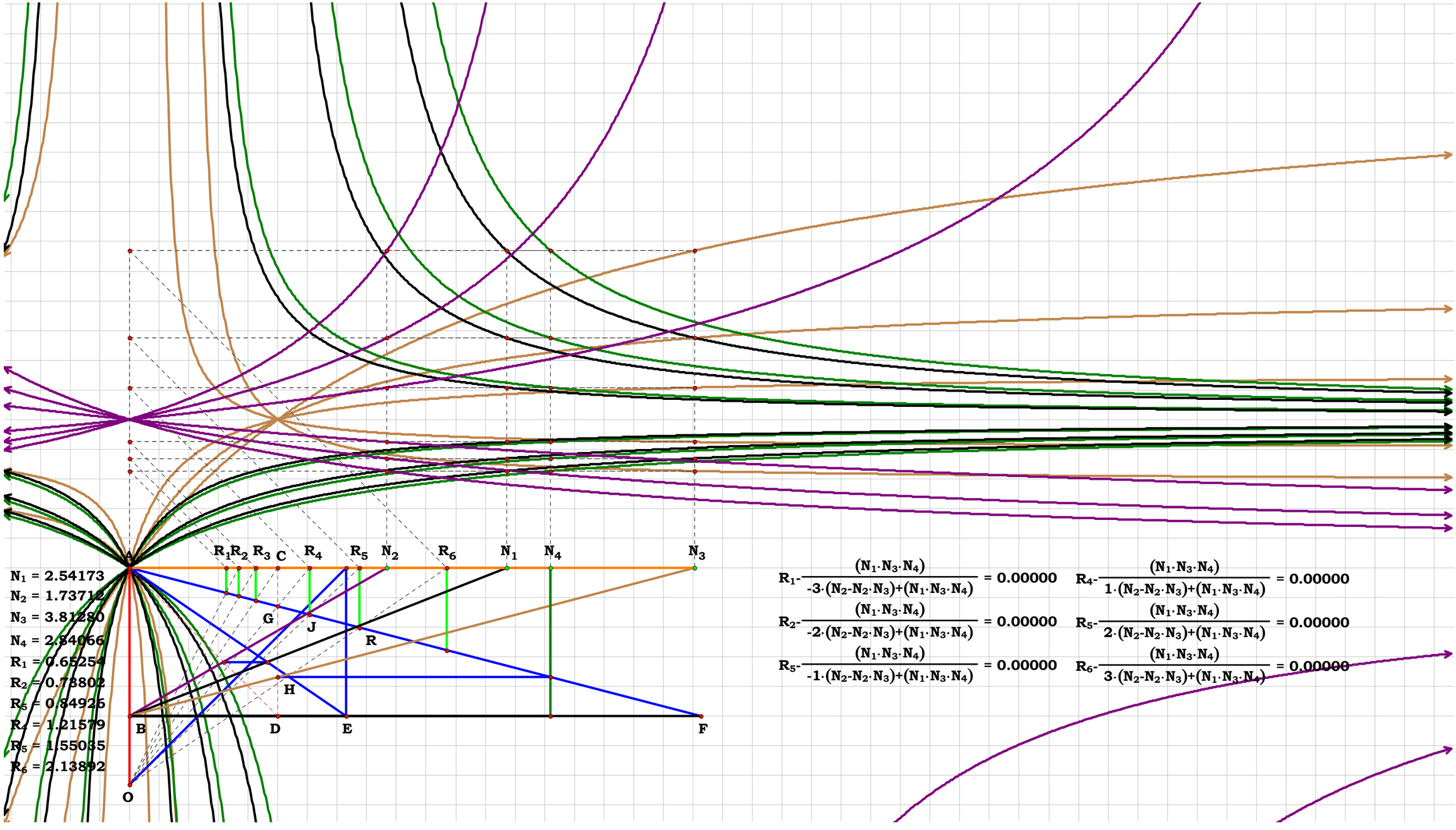
$R_3 - \frac{N_1 \cdot N_3 \cdot N_4}{-1 \cdot (N_2 - N_2 \cdot N_3) + N_1 \cdot N_3 \cdot N_4} = 0$ $R_4 - \frac{N_1 \cdot N_3 \cdot N_4}{1 \cdot (N_2 - N_2 \cdot N_3) + N_1 \cdot N_3 \cdot N_4} = 0$ $R_5 - \frac{N_1 \cdot N_3 \cdot N_4}{2 \cdot (N_2 - N_2 \cdot N_3) + N_1 \cdot N_3 \cdot N_4} = 0$ $R_6 - \frac{N_1 \cdot N_3 \cdot N_4}{3 \cdot (N_2 - N_2 \cdot N_3) + N_1 \cdot N_3 \cdot N_4} = 0$

$N_1 = 5.00000$
$N_2 = 3.00000$
$N_3 = 2.00000$
$N_4 = 6.00000$

$A = 1.05263$ $G = 1.53846$ $M = 2.85714$
$B = 1.11111$ $H = 1.66667$ $N = 3.33333$
$C = 1.17647$ $I = 1.81818$ $O = 4.00000$
$D = 1.25000$ $J = 2.00000$ $P = 5.00000$
$E = 1.33333$ $K = 2.22222$ $Q = 6.66667$
$F = 1.42857$ $L = 2.50000$ $R = 10.00000$

$R_1 = 0.65254$
$R_2 = 0.738017$
$R_3 = 0.849263$
$R_4 = 1.215792$
$R_5 = 1.550344$
$R_6 = 2.138912$





$N_1 = 2.54173$
$N_2 = 1.73712$
$N_3 = 3.81280$
$N_4 = 2.84066$
$R_1 = 0.65254$
$R_2 = 0.78802$
$R_3 = 0.84925$
$R_4 = 1.21579$
$R_5 = 1.55035$
$R_6 = 2.13892$

$$R_1\text{-}\frac{(N_1\cdot N_3\cdot N_4)}{-3\cdot(N_2\text{-}N_2\cdot N_3)+(N_1\cdot N_3\cdot N_4)} = 0.00000 \qquad R_4\text{-}\frac{(N_1\cdot N_3\cdot N_4)}{1\cdot(N_2\text{-}N_2\cdot N_3)+(N_1\cdot N_3\cdot N_4)} = 0.00000$$

$$R_2\text{-}\frac{(N_1\cdot N_3\cdot N_4)}{-2\cdot(N_2\text{-}N_2\cdot N_3)+(N_1\cdot N_3\cdot N_4)} = 0.00000 \qquad R_5\text{-}\frac{(N_1\cdot N_3\cdot N_4)}{2\cdot(N_2\text{-}N_2\cdot N_3)+(N_1\cdot N_3\cdot N_4)} = 0.00000$$

$$R_5\text{-}\frac{(N_1\cdot N_3\cdot N_4)}{-1\cdot(N_2\text{-}N_2\cdot N_3)+(N_1\cdot N_3\cdot N_4)} = 0.00000 \qquad R_6\text{-}\frac{(N_1\cdot N_3\cdot N_4)}{3\cdot(N_2\text{-}N_2\cdot N_3)+(N_1\cdot N_3\cdot N_4)} = 0.00000$$

$AB := 1$

$N_1 := 1.63207$

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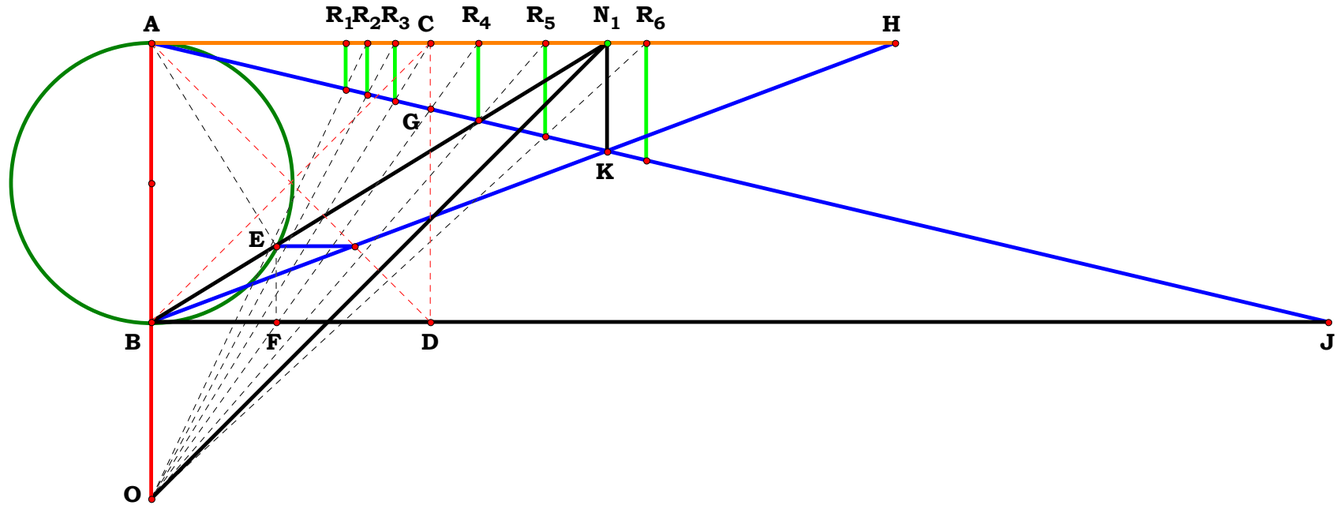
$N_1 = 1.63207$
$R_1 = 0.69629$
$R_2 = 0.77472$
$R_3 = 0.87306$
$R_4 = 1.17013$
$R_5 = 1.41002$
$R_6 = 1.77363$



$BN_1 := \sqrt{AB^2 + N_1^2}$ $\quad BE := \frac{AB^2}{BN_1}$ $\quad EF := \frac{BE}{BN_1}$

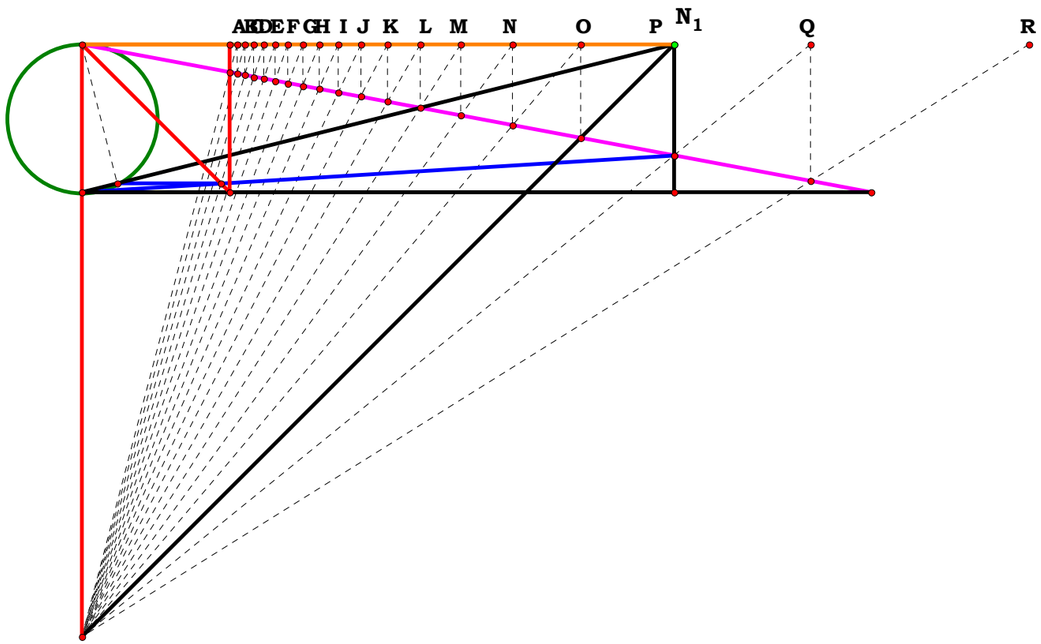
$AH := \frac{1 - EF}{EF}$ $\quad KN_1 := 1 - \frac{N_1}{AH}$ $\quad BJ := \frac{N_1}{KN_1}$

$CG := \frac{1}{BJ}$ $\quad CG - \frac{N_1 - 1}{N_1^2} = 0$ $\quad R_4 := \frac{N_1}{N_1 - CG}$ $\quad R_5 := \frac{N_1}{N_1 - 2 \cdot CG}$

$R_6 := \frac{N_1}{N_1 - 3 \cdot CG}$ $\quad R_3 := \frac{N_1}{N_1 + CG}$ $\quad R_2 := \frac{N_1}{N_1 + 2 \cdot CG}$ $\quad R_1 := \frac{N_1}{N_1 + 3 \cdot CG}$

$N_1 = 4.00000$

A = 1.04918	G = 1.48837	M = 2.56000	
B = 1.10345	H = 1.60000	N = 2.90909	
C = 1.16364	I = 1.72973	O = 3.36842	
D = 1.23077	J = 1.88235	P = 4.00000	
E = 1.30612	K = 2.06452	Q = 4.92308	
F = 1.39130	L = 2.28571	R = 6.40000	



$$\frac{N_1^3}{N_1^3 - \text{Index} \cdot (N_1 - 1)}$$

$R_1 - \frac{N_1^3}{N_1^3 - (N_1 - 1) \cdot -3} = 0$ $\quad R_2 - \frac{N_1^3}{N_1^3 + 2 \cdot N_1 - 2} = 0$

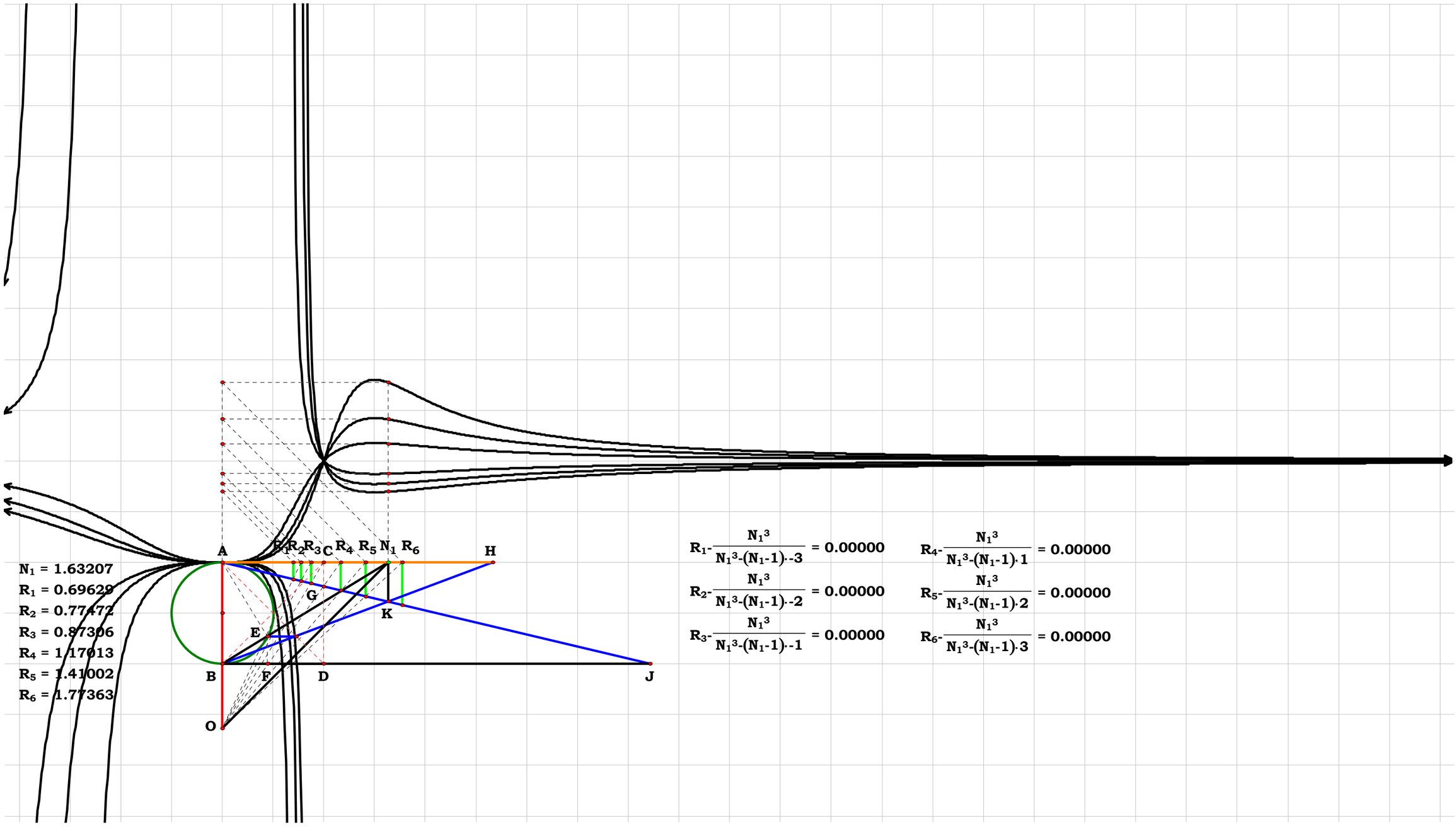
$R_3 - \frac{N_1^3}{N_1^3 + N_1 - 1} = 0$ $\quad R_4 - \frac{N_1^3}{N_1^3 - N_1 + 1} = 0$

$R_5 - \frac{N_1^3}{N_1^3 - 2 \cdot N_1 + 2} = 0$ $\quad R_6 - \frac{N_1^3}{N_1^3 - 3 \cdot N_1 + 3} = 0$

$R_1 = 0.696289$ $\quad R_4 = 1.170131$

$R_2 = 0.77472$ $\quad R_5 = 1.410019$

$R_3 = 0.873061$ $\quad R_6 = 1.773629$



$$R_1 - \frac{N_1^3}{N_1^3-(N_1-1)\cdot -3} = 0.00000 \qquad R_4 - \frac{N_1^3}{N_1^3-(N_1-1)\cdot 1} = 0.00000$$

$$R_2 - \frac{N_1^3}{N_1^3-(N_1-1)\cdot -2} = 0.00000 \qquad R_5 - \frac{N_1^3}{N_1^3-(N_1-1)\cdot 2} = 0.00000$$

$$R_3 - \frac{N_1^3}{N_1^3-(N_1-1)\cdot -1} = 0.00000 \qquad R_6 - \frac{N_1^3}{N_1^3-(N_1-1)\cdot 3} = 0.00000$$

$AB := 1$

$N_1 := 2.99687$

$N_2 := 2.21643$

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$$CE := \frac{1}{N_1}$$

$$R_4 := \frac{N_2}{N_2 - CE} \qquad R_5 := \frac{N_2}{N_2 - 2 \cdot CE} \qquad R_6 := \frac{N_2}{N_2 - 3 \cdot CE}$$

$$R_3 := \frac{N_2}{N_2 + CE} \qquad R_2 := \frac{N_2}{N_2 + 2 \cdot CE} \qquad R_1 := \frac{N_2}{N_2 + 3 \cdot CE}$$

$$\frac{N_1 \cdot N_2}{N_1 \cdot N_2 - Index}$$

$$R_4 - \frac{N_1 \cdot N_2}{N_1 \cdot N_2 - 1} = 0 \qquad R_5 - \frac{N_1 \cdot N_2}{N_1 \cdot N_2 - 2} = 0$$

$$R_6 - \frac{N_1 \cdot N_2}{N_1 \cdot N_2 - 3} = 0 \qquad R_3 - \frac{N_1 \cdot N_2}{N_1 \cdot N_2 - -1} = 0$$

$$R_2 - \frac{N_1 \cdot N_2}{N_1 \cdot N_2 - -2} = 0 \qquad R_1 - \frac{N_1 \cdot N_2}{N_1 \cdot N_2 - -3} = 0$$

$R_1 = 0.688873$

$R_2 = 0.768582$

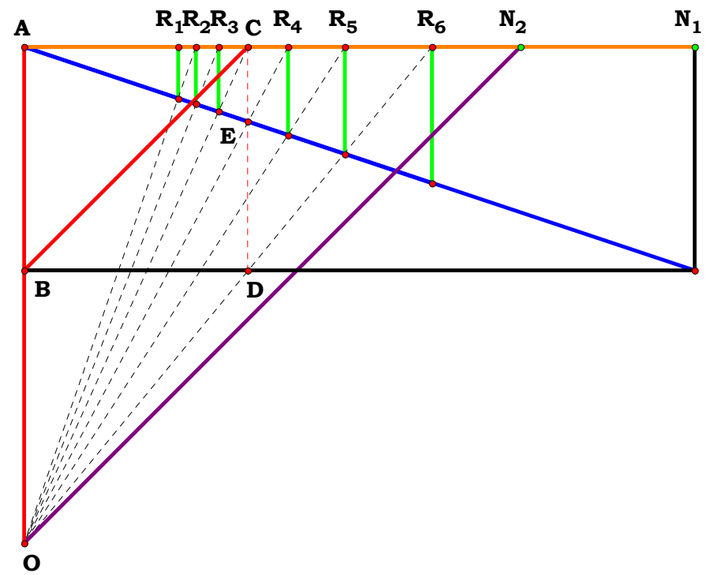
$R_3 = 0.86915$

$R_4 = 1.177231$

$R_5 = 1.430816$

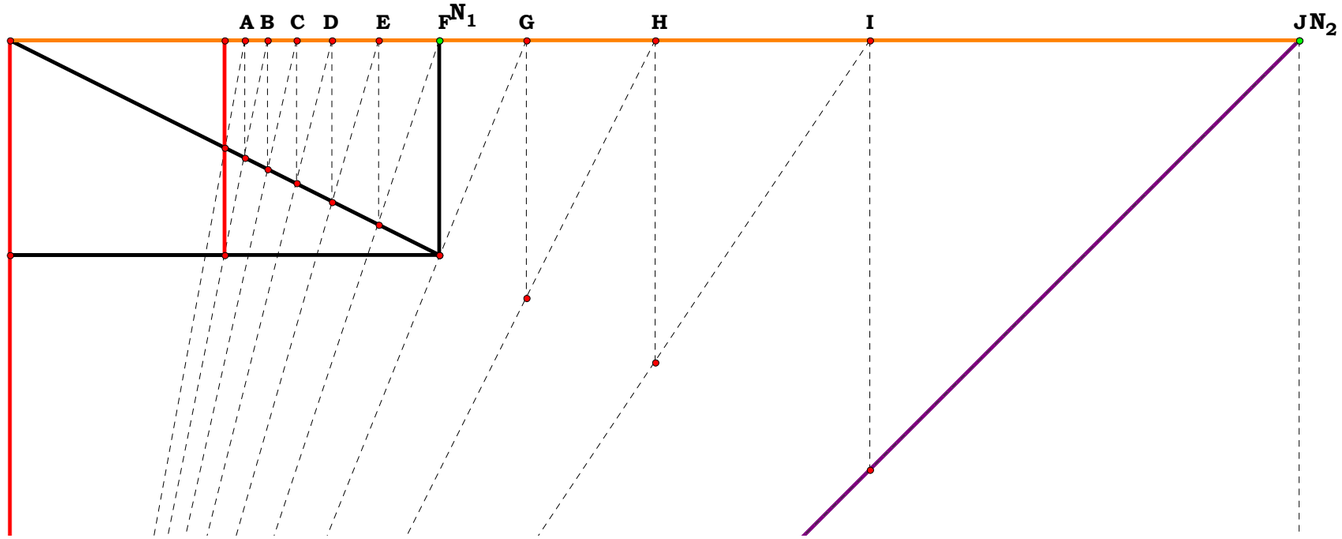
$R_6 = 1.823643$

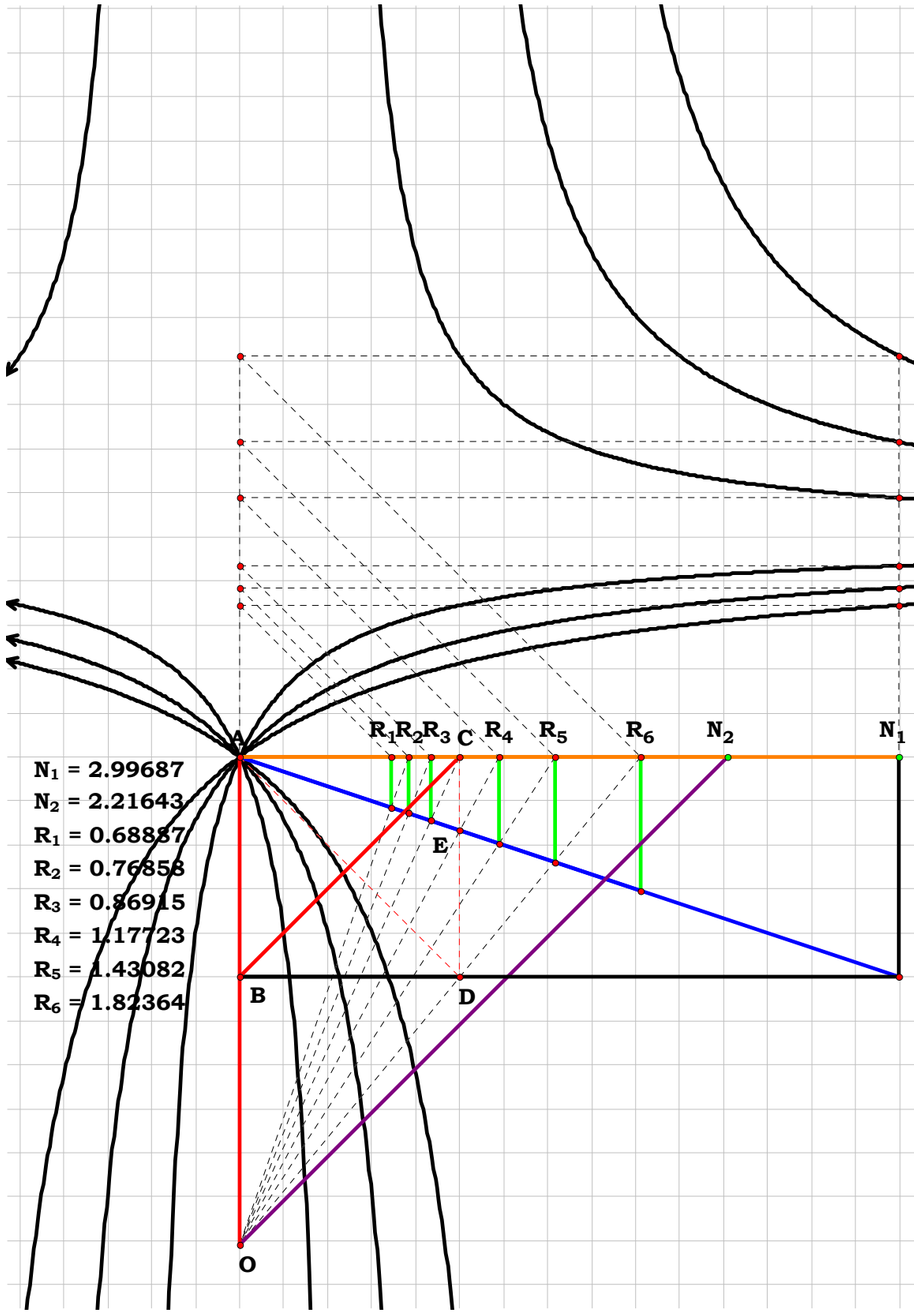
$N_1 = 2.99687$
$N_2 = 2.21643$
$R_1 = 0.68887$
$R_2 = 0.76858$
$R_3 = 0.86915$
$R_4 = 1.17723$
$R_5 = 1.43082$
$R_6 = 1.82364$



$N_1 = 2.00000$
$N_2 = 6.00000$

A = 1.09091	G = 2.40000	M = -12.00000
B = 1.20000	H = 3.00000	N = -6.00000
C = 1.33333	I = 4.00000	O = -4.00000
D = 1.50000	J = 6.00000	P = -3.00000
E = 1.71429	K = 12.00000	Q = -2.40000
F = 2.00000	L = $-8.34511 \cdot 10^{13}$	R = -2.00000





$N_1 = 2.99687$
$N_2 = 2.21643$
$R_1 = 0.68887$
$R_2 = 0.76858$
$R_3 = 0.86915$
$R_4 = 1.17723$
$R_5 = 1.43082$
$R_6 = 1.82364$

$$R_1\text{-}\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)\text{-}1\text{--}3} = 0.00000 \qquad R_4\text{-}\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)\text{-}1 \cdot 1} = 0.00000$$

$$R_2\text{-}\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)\text{-}1\text{--}2} = 0.00000 \qquad R_5\text{-}\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)\text{-}1 \cdot 2} = 0.00000$$

$$R_3\text{-}\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)\text{-}1\text{--}1} = 0.00000 \qquad R_6\text{-}\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)\text{-}1 \cdot 3} = 0.00000$$

Circle
Show Lines
0
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12
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15

Circle
Show Lines
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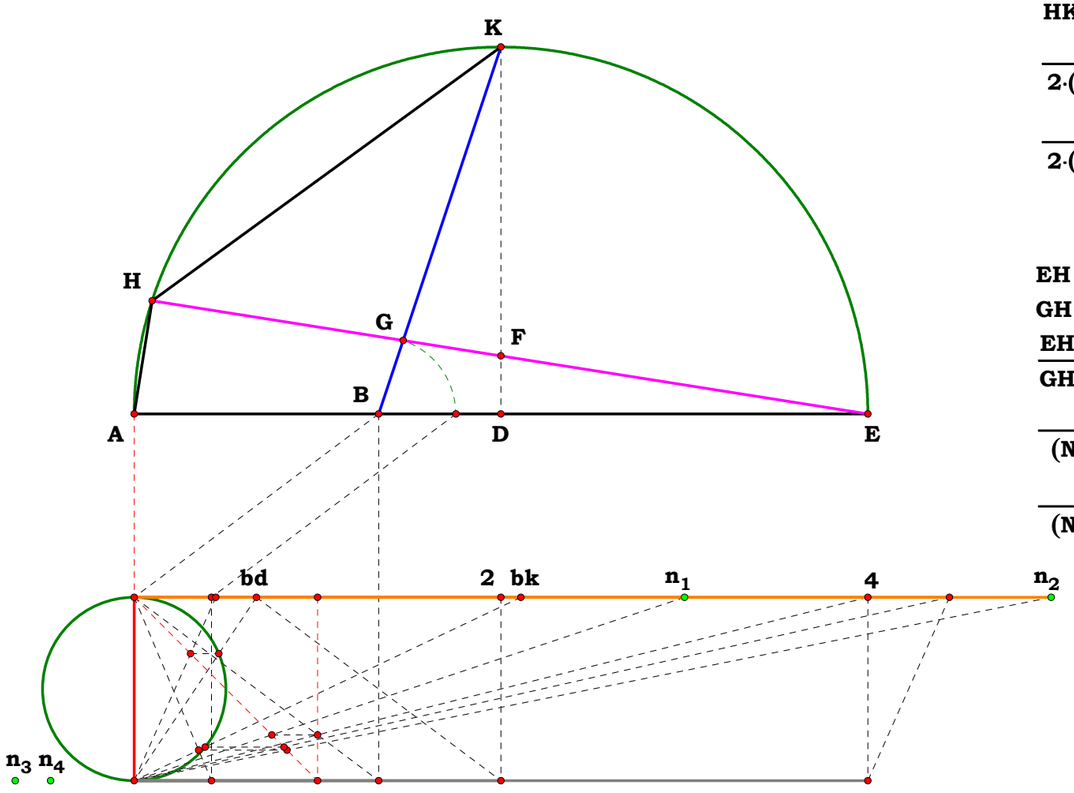


$AH = 0.62385$

$HK = 2.35269$

$\frac{AH}{HK} = 0.26517$

$\frac{\sqrt{2}\cdot N_1}{2\cdot(N_1-1)\cdot(N_2-1)} = 0.26517$

$\frac{\sqrt{2}\cdot N_1}{2\cdot(N_1-1)\cdot(N_2-1)} - \frac{AH}{HK} = 0.00000$

$EH = 3.95105$

$GH = 1.38633$

$\frac{EH}{GH} = 2.85000$

$\frac{N_1\cdot N_2\cdot((2\cdot N_1\cdot N_2-2\cdot N_2-N_1)+2)}{(N_2-1)\cdot((((2\cdot N_1\cdot N_2-2\cdot N_2)+N_1^2)-2\cdot N_1)+2)} = 2.85000$

$\frac{N_1\cdot N_2\cdot((2\cdot N_1\cdot N_2-2\cdot N_2-N_1)+2)}{(N_2-1)\cdot((((2\cdot N_1\cdot N_2-2\cdot N_2)+N_1^2)-2\cdot N_1)+2)} - \frac{EH}{GH} = 0.00000$

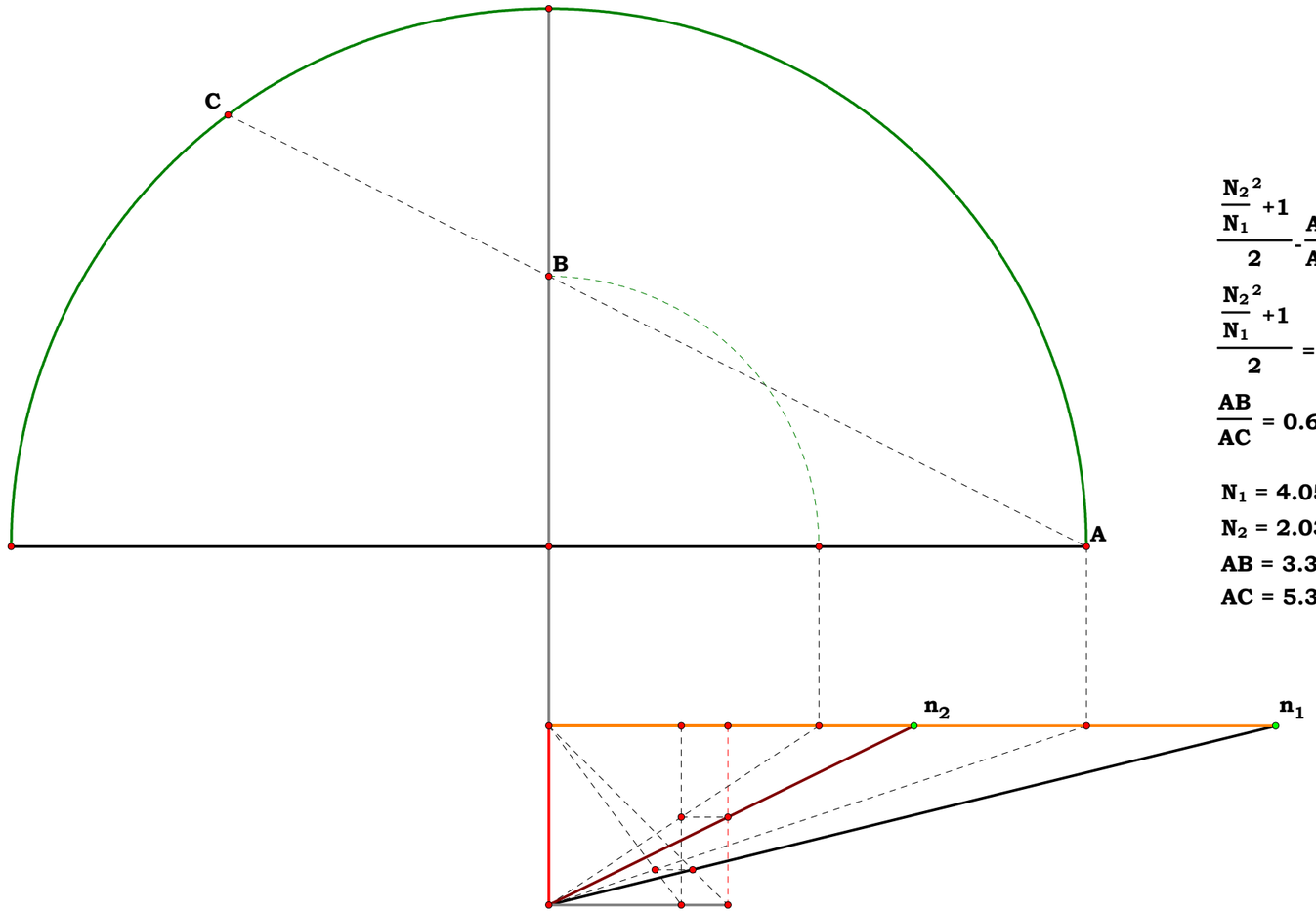
$N_1 = 3.00000$

$N_2 = 5.00000$

Points

$bd = 0.66667$

$bd\text{^}2 = 0.44444$



$$\frac{\frac{N_2^2}{N_1}+1}{2}-\frac{AB}{AC} = 0.00000$$

$$\frac{\frac{N_2^2}{N_1}+1}{2} = 0.62621$$

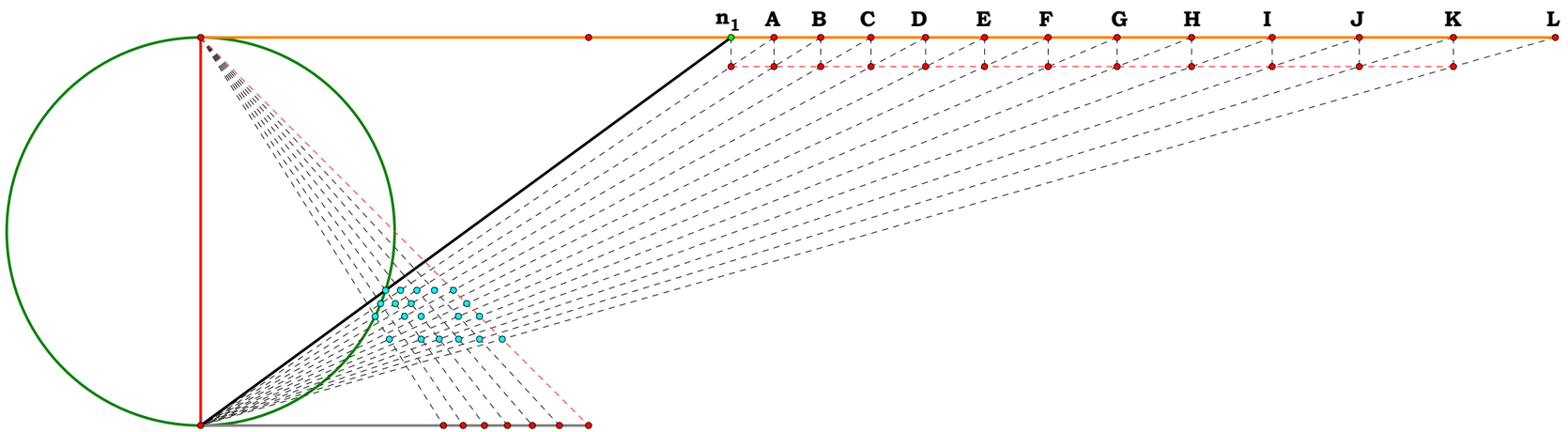
$$\frac{AB}{AC} = 0.62621$$

$N_1 = 4.05604$

$N_2 = 2.03783$

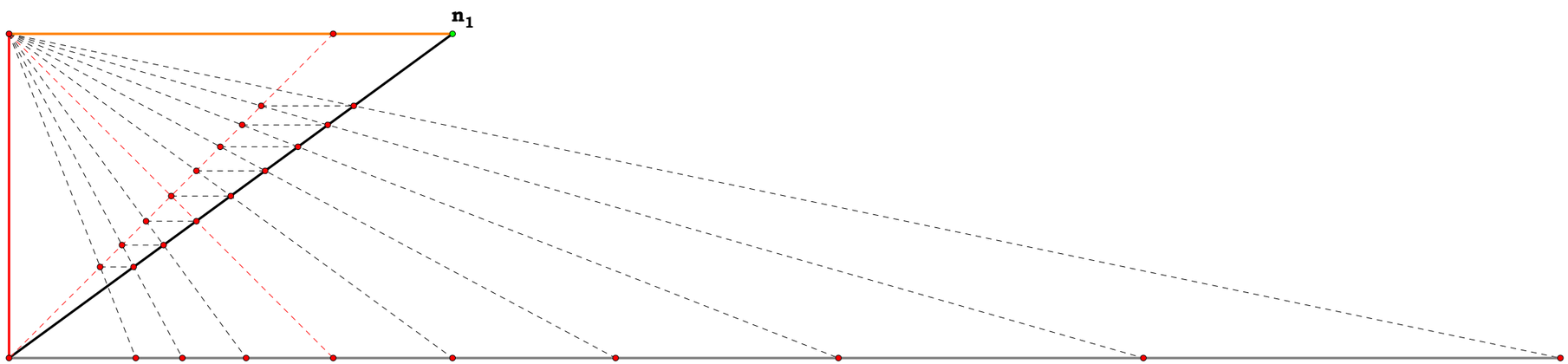
$AB = 3.35735$

$AC = 5.36137$



N_1 = 1.36693

A = 1.47803	E = 2.02036	I = 2.76169	$N_1^{1.25}$-A = 0.00000	$N_1^{2.25}$-E = 0.00000	$N_1^{3.25}$-I = 0.00000
B = 1.59816	F = 2.18457	J = 2.98615	$N_1^{1.5}$-B = 0.00000	$N_1^{2.5}$-F = 0.00000	$N_1^{3.5}$-J = 0.00000
C = 1.72805	G = 2.36212	K = 3.22885	$N_1^{1.75}$-C = 0.00000	$N_1^{2.75}$-G = 0.00000	$N_1^{3.75}$-K = 0.00000
D = 1.86850	H = 2.55410	L = 3.49128	N_1^{2}-D = 0.00000	N_1^{3}-H = 0.00000	N_1^{4}-L = 0.00000



$N_1 = 1.36763$

$A = 1.00000$
$B = 1.36763$
$C = 1.87042$
$D = 2.55805$

$E = 3.49847$
$F = 4.78462$
$G = 0.73119$
$H = 0.53464$
$I = 0.39092$

$N_1^0\text{-}A = 0.00000$
$N_1^1\text{-}B = 0.00000$
$N_1^2\text{-}C = 0.00000$
$N_1^3\text{-}D = 0.00000$

$N_1^4\text{-}E = 0.00000$
$N_1^5\text{-}F = 0.00000$
$N_1^{-1}\text{-}G = 0.00000$
$N_1^{-2}\text{-}H = 0.00000$
$N_1^{-3}\text{-}I = 0.00000$

$N_1 = 2.10483$

$N_2 = 2.59960$

$x_A = 2.10483$

$x_B = 2.59960$

$x_C = 3.21068$

$x_D = 3.96539$

$x_E = 4.89752$

$x_F = 1.70423$

$x_G = 1.37987$

$x_H = 1.11724$

$x_I = 0.90460$

$\frac{N_2^0}{N_1^{-1}} = 2.10483$

$\frac{N_2^1}{N_1^0} = 2.59960$

$\frac{N_2^2}{N_1^1} = 3.21068$

$\frac{N_2^3}{N_1^2} = 3.96539$

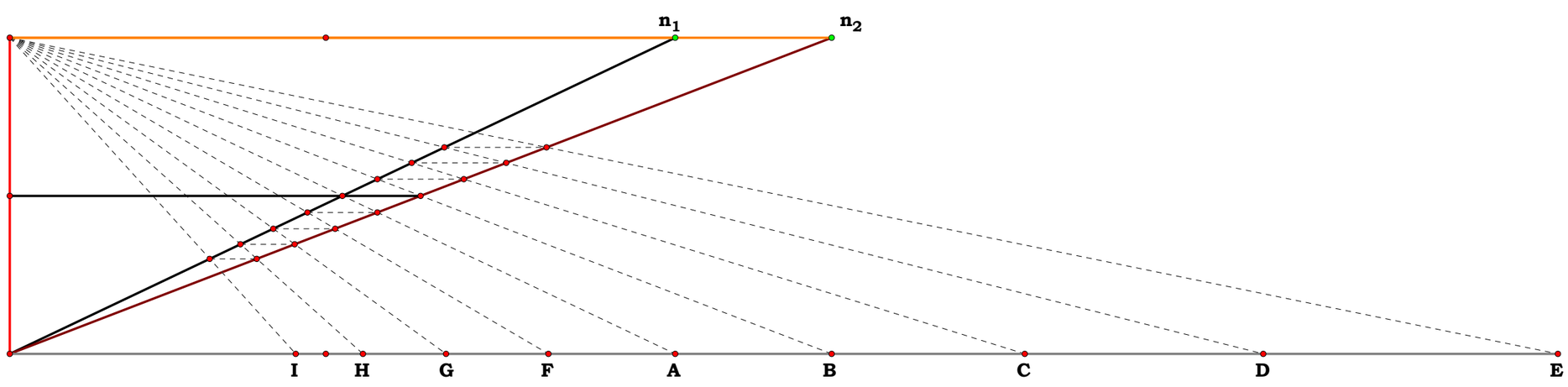
$\frac{N_2^4}{N_1^3} = 4.89752$

$\frac{N_2^{-1}}{N_1^{-2}} = 1.70423$

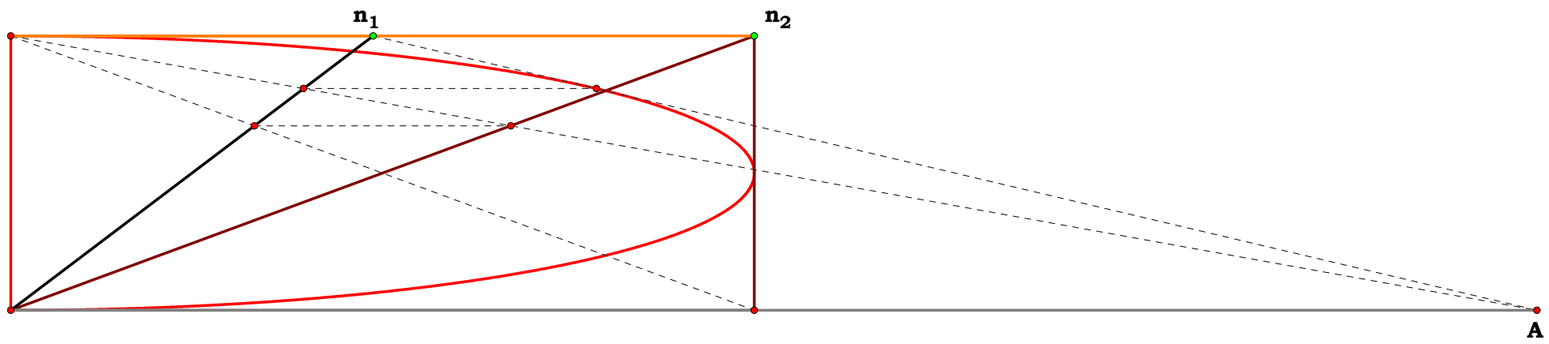
$\frac{N_2^{-2}}{N_1^{-3}} = 1.37987$

$\frac{N_2^{-3}}{N_1^{-4}} = 1.11724$

$\frac{N_2^{-4}}{N_1^{-5}} = 0.90460$



From any point n_1 draw the tangent to the ellipse n_2. Or given the square n_2 divide it by n_1.



$N_1 = 1.32088$ $A = 5.56312$

$N_2 = 2.71076$ $\frac{N_2^2}{N_1} - A = 0.00000$

A^2-B = 0.00000
(A·B)-C = 0.00000
B^2-D = 0.00000
(B·C)-E = 0.00000

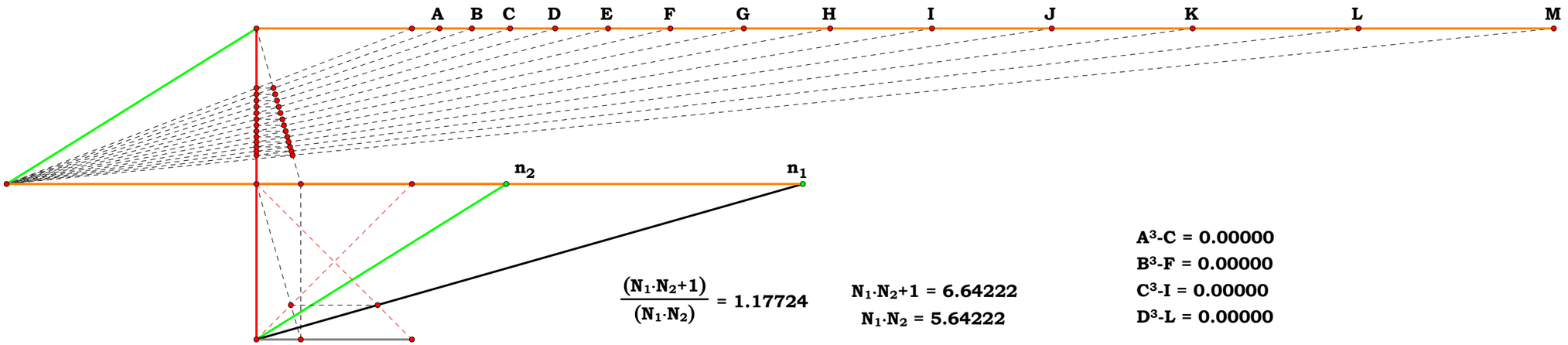
C^2-F = 0.00000
(C·D)-G = 0.00000
D^2-H = 0.00000
(D·E)-I = 0.00000

E^2-J = 0.00000
(E·F)-K = 0.00000
F^2-L = 0.00000
(F·G)-M = 0.00000

$\frac{N_1 \cdot N_2 + 1}{N_1 \cdot N_2}^{1}$ -A = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{2}$ -B = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{3}$ -C = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{4}$ -D = 0.00000

$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{5}$ -E = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{6}$ -F = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{7}$ -G = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{8}$ -H = 0.00000

$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{9}$ -I = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{10}$ -J = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{11}$ -K = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{12}$ -L = 0.00000
$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}^{13}$ -M = 0.00000



$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)}$ = 1.17724

$N_1 \cdot N_2 + 1$ = 6.64222
$N_1 \cdot N_2$ = 5.64222

A^3-C = 0.00000
B^3-F = 0.00000
C^3-I = 0.00000
D^3-L = 0.00000

N_1 = 3.51340
N_2 = 1.60591

A = 1.17724
B = 1.38588
C = 1.63151
D = 1.92067
E = 2.26108

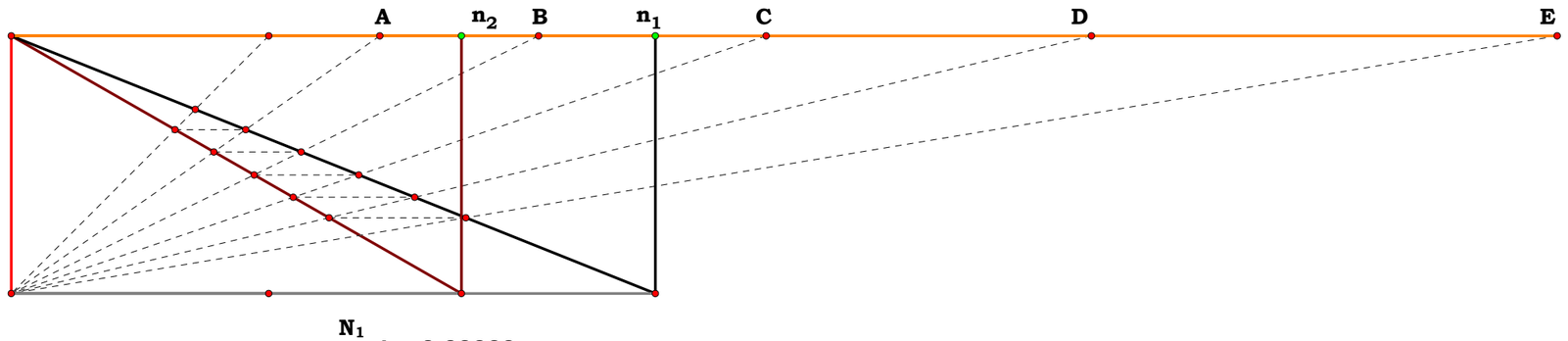
F = 2.66183
G = 3.13360
H = 3.68898
I = 4.34280

J = 5.11249
K = 6.01861
L = 7.08532
M = 8.34108

A^2 = 1.38588
A·B = 1.63151
B^2 = 1.92067
B·C = 2.26108

C^2 = 2.66183
C·D = 3.13360
D^2 = 3.68898
D·E = 4.34280

E^2 = 5.11249
E·F = 6.01861
F^2 = 7.08532
F·G = 8.34108



A = 1.43109

B = 2.04801

C = 2.93088

D = 4.19435

E = 6.00248

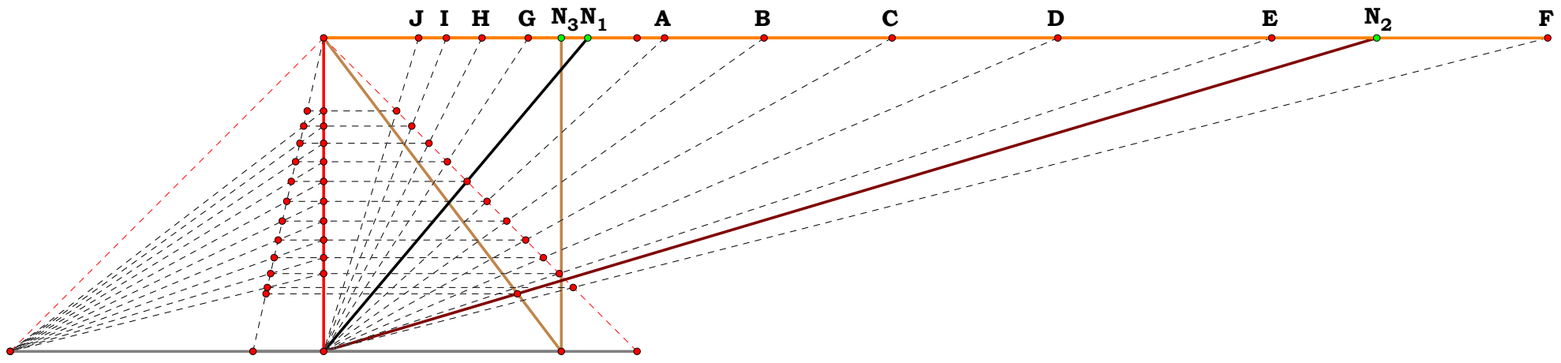
$$\frac{N_1}{N_2} - A = 0.00000$$

$$\frac{N_1^{\,2}}{N_2} - B = 0.00000$$

$$\frac{N_1^{\,3}}{N_2} - C = 0.00000$$

$$\frac{N_1^{\,4}}{N_2} - D = 0.00000$$

$$\frac{N_1^{\,5}}{N_2} - E = 0.00000$$



$$\frac{N_1^{\frac{1}{4}} \cdot N_2^{\,4}}{N_2 - N_3} - D = 0.00000$$

$$\frac{N_1 \cdot N_2^{\,4}}{(N_2 - N_3)^4} - D = 0.00000$$

$$\frac{N_2}{N_2 - N_3} = 1.29123$$

$N_1 = 0.84255$

$N_2 = 3.35986$

$N_3 = 0.75780$

$A = 1.08792$ $G = 0.65251$

$B = 1.40476$ $H = 0.50534$

$C = 1.81388$ $I = 0.39136$

$D = 2.34214$ $J = 0.30309$

$E = 3.02425$

$F = 3.90501$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{1} \cdot N_1 - A = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{2} \cdot N_1 - B = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{3} \cdot N_1 - C = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{4} \cdot N_1 - D = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{5} \cdot N_1 - E = 0.00000$$

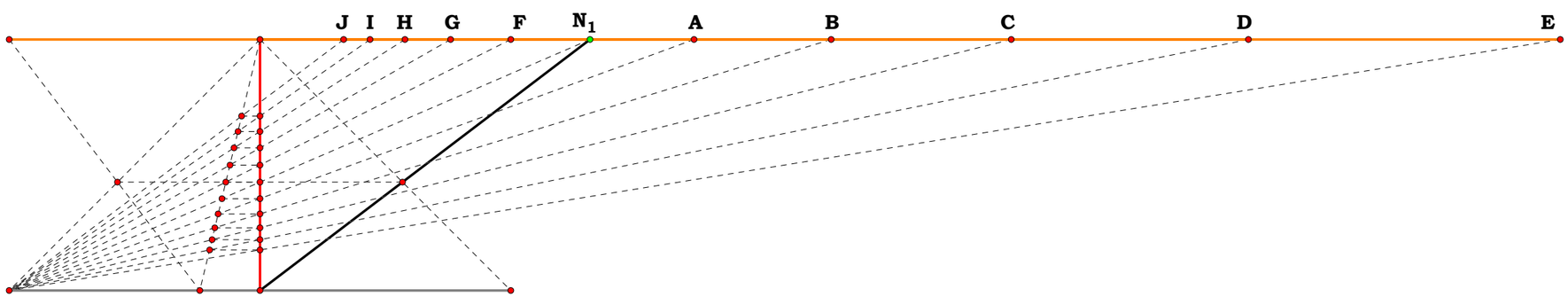
$$\left(\frac{N_2}{N_2 - N_3}\right)^{6} \cdot N_1 - F = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{-1} \cdot N_1 - G = 0.00000$$

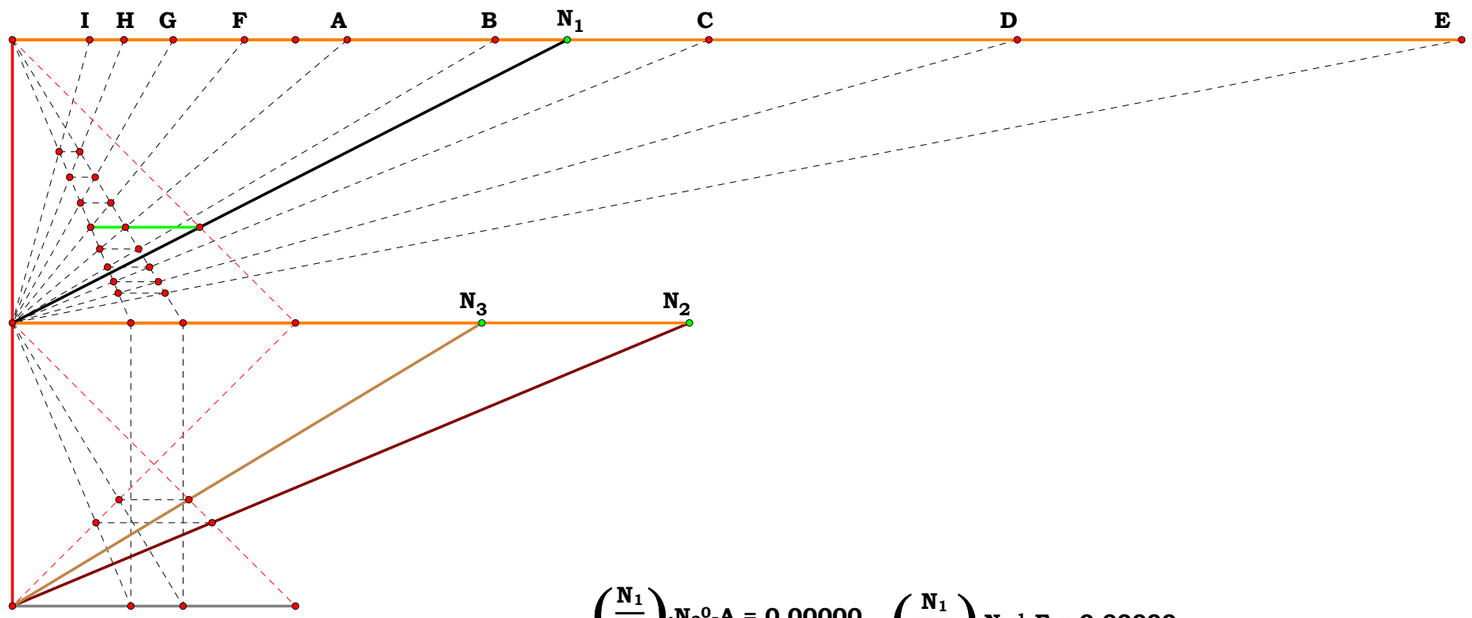
$$\left(\frac{N_2}{N_2 - N_3}\right)^{-2} \cdot N_1 - H = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{-3} \cdot N_1 - I = 0.00000$$

$$\left(\frac{N_2}{N_2 - N_3}\right)^{-4} \cdot N_1 - J = 0.00000$$



N_1 = 1.31554	A = 1.73065	F = 1.00000	N_1^2-A = 0.00000	N_1^0-F = 0.00000
	B = 2.27675	G = 0.76014	N_1^3-B = 0.00000	N_1^{-1}-G = 0.00000
	C = 2.99516	H = 0.57782	N_1^4-C = 0.00000	N_1^{-2}-H = 0.00000
	D = 3.94026	I = 0.43922	N_1^5-D = 0.00000	N_1^{-3}-I = 0.00000
	E = 5.18358	J = 0.33387	N_1^6-E = 0.00000	N_1^{-4}-J = 0.00000



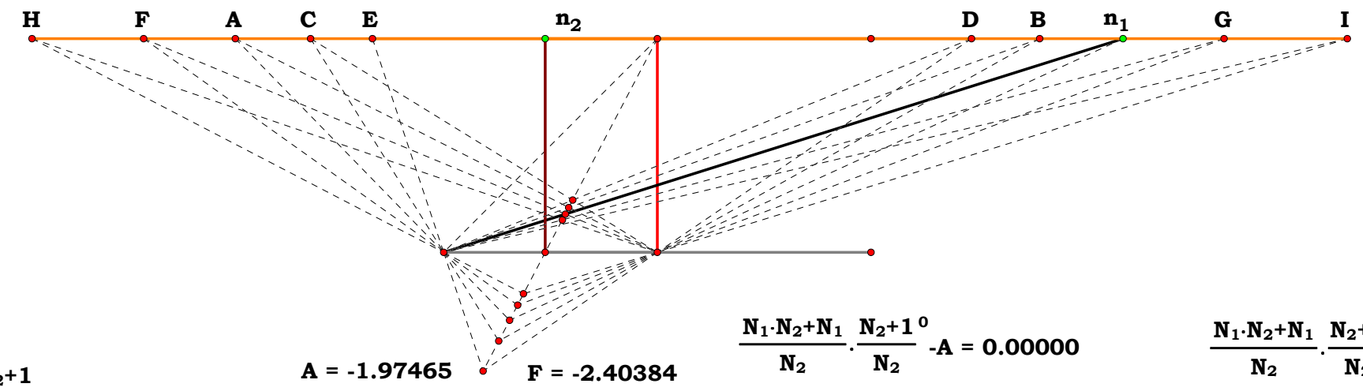
$N_1 = 1.95987$
$N_2 = 2.39124$
$N_3 = 1.65771$

$A = 1.18227$
$B = 1.70541$
$C = 2.46005$
$D = 3.54859$
$E = 5.11881$

$F = 0.81960$
$G = 0.56819$
$H = 0.39389$
$I = 0.27306$

$\left(\frac{N_1}{N_3}\right)\cdot N_2^{0}\text{-}A = 0.00000$
$\left(\frac{N_1}{N_3^{2}}\right)\cdot N_2\text{-}B = 0.00000$
$\left(\frac{N_1}{N_3^{3}}\right)\cdot N_2^{2}\text{-}C = 0.00000$
$\left(\frac{N_1}{N_3^{4}}\right)\cdot N_2^{3}\text{-}D = 0.00000$
$\left(\frac{N_1}{N_3^{5}}\right)\cdot N_2^{4}\text{-}E = 0.00000$

$\left(\frac{N_1}{N_3^{0}}\right)\cdot N_2^{-1}\text{-}F = 0.00000$
$\left(\frac{N_1}{N_3^{-1}}\right)\cdot N_2^{-2}\text{-}G = 0.00000$
$\left(\frac{N_1}{N_3^{-2}}\right)\cdot N_2^{-3}\text{-}H = 0.00000$
$\left(\frac{N_1}{N_3^{-3}}\right)\cdot N_2^{-4}\text{-}I = 0.00000$



$\frac{N_2+1}{N_2} = -0.90634$

$\frac{N_1 \cdot N_2+N_1}{N_2} = -1.97465$

$N_1 = 2.17870$

$N_2 = -0.52456$

A = -1.97465

B = 1.78970

C = -1.62208

D = 1.47016

E = -1.33247

F = -2.40384

G = 2.65225

H = -2.92632

I = 3.22872

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{0} -A = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{1} -B = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{2} -C = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{3} -D = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{4} -E = 0.00000$

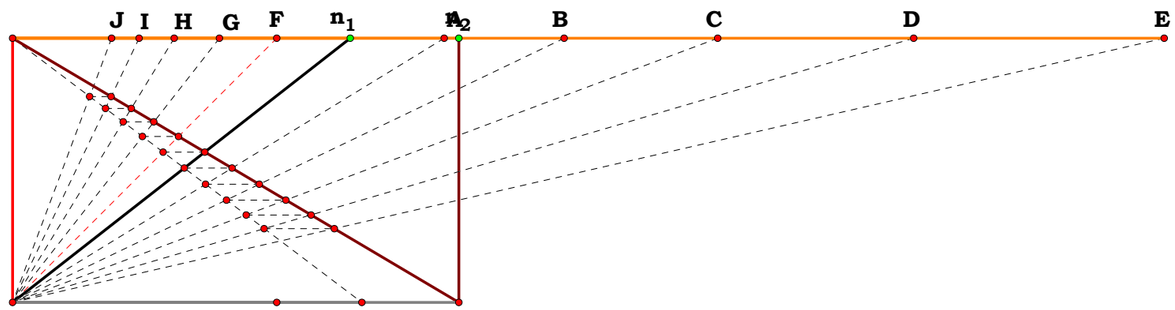
$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-1} -N_1 = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-2} -F = 0.00000$

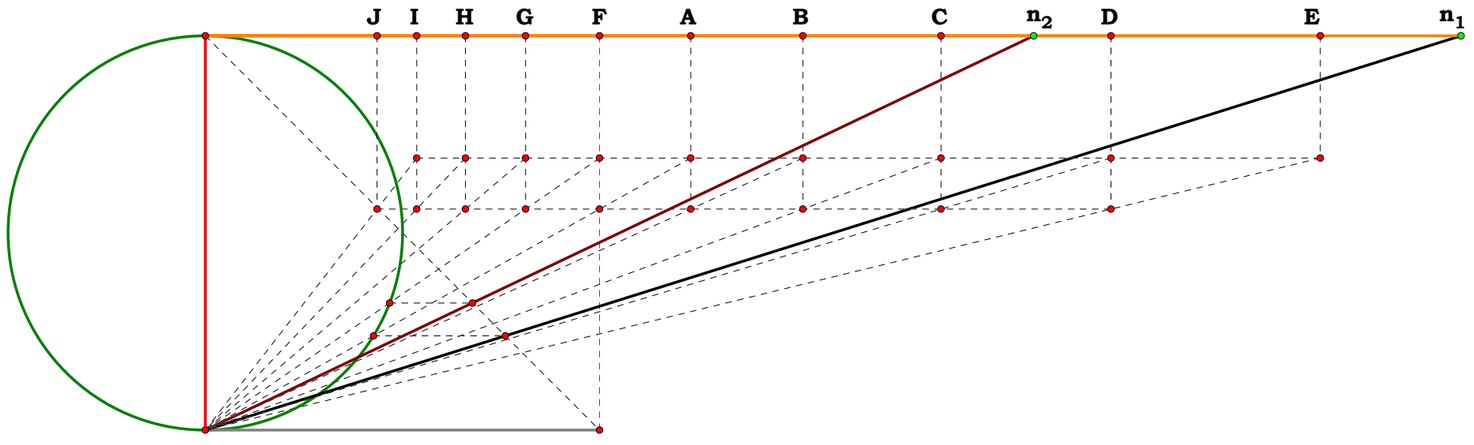
$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-3} -G = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-4} -H = 0.00000$

$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-5} -I = 0.00000$



	A = 1.63353	F = 1.00000	N_1^2-A = 0.00000	N_1^0-F = 0.00000
N_1 = 1.27809	B = 2.08780	G = 0.78241	N_1^3-B = 0.00000	N_1^{-1}-G = 0.00000
N_2 = 1.68896	C = 2.66841	H = 0.61217	N_1^4-C = 0.00000	N_1^{-2}-H = 0.00000
	D = 3.41048	I = 0.47897	N_1^5-D = 0.00000	N_1^{-3}-I = 0.00000
	E = 4.35891	J = 0.37476	N_1^6-E = 0.00000	N_1^{-4}-J = 0.00000



$\frac{\sqrt{N_1}}{\sqrt{N_2}} = 1.23112$

$N_1 = 3.18458$

$N_2 = 2.10112$

A = 1.23112

B = 1.51566

C = 1.86597

D = 2.29723

E = 2.82817

F = 1.00000

G = 0.81227

H = 0.65978

I = 0.53592

J = 0.43531

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^1$ -A = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^2$ -B = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^3$ -C = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^4$ -D = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^5$ -E = 0.00000

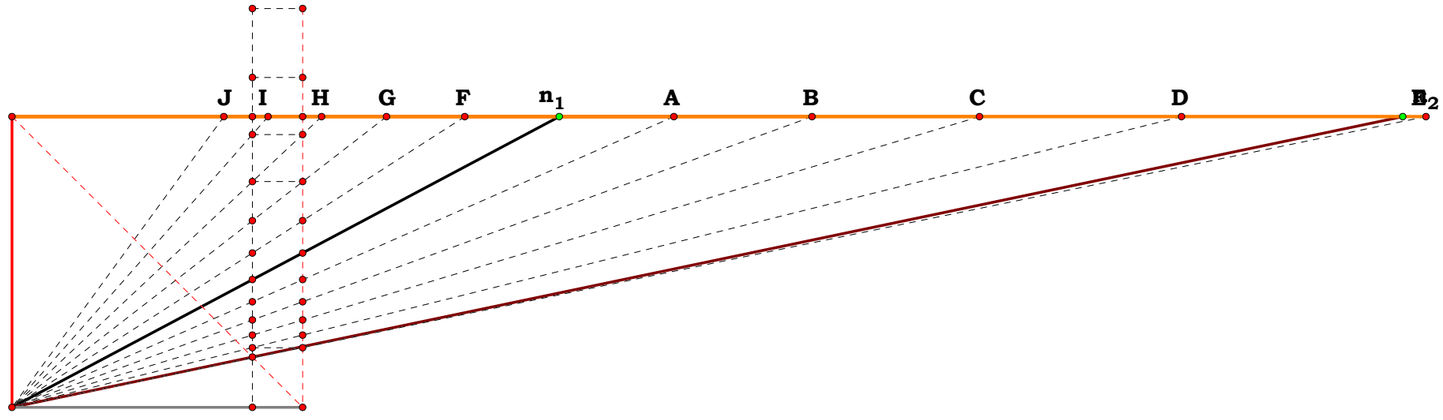
$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^0$ -F = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^{-1}$ -G = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^{-2}$ -H = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^{-3}$ -I = 0.00000

$\left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^{-4}$ -J = 0.00000



$$\frac{N_1 \cdot N_2 + N_1}{N_2} = 2.27629$$

$$\frac{N_2 + 1}{N_2} = 1.20903$$

$N_1 = 1.88273$

$N_2 = 4.78390$

A = 2.27629
B = 2.75211
C = 3.32740
D = 4.02294
E = 4.86387

F = 1.55722
G = 1.28799
H = 1.06530
I = 0.88112
J = 0.72878

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,0}}{N_2} - A = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,1}}{N_2} - B = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,2}}{N_2} - C = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,3}}{N_2} - D = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,4}}{N_2} - E = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-1}}{N_2} - N_1 = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-2}}{N_2} - F = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-3}}{N_2} - G = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-4}}{N_2} - H = 0.00000$$

$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-5}}{N_2} - I = 0.00000$$

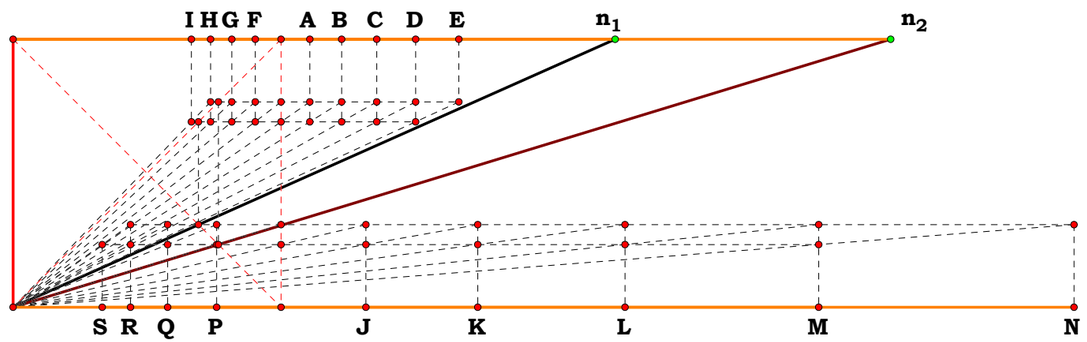
$$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1^{\,-6}}{N_2} - J = 0.00000$$

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)} = 1.10710$$

A = 1.10710
B = 1.22567
C = 1.35694
D = 1.50227
E = 1.66316
F = 0.90326
G = 0.81588
H = 0.73695
I = 0.66566

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{1} - A = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{2} - B = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{3} - C = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{4} - D = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{5} - E = 0.00000$$

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{-1} - F = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{-2} - G = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{-3} - H = 0.00000$$
$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)}^{-4} - I = 0.00000$$



$$\frac{N_2+1}{N_1+1} = 1.31677$$

N_1 = 2.24615
N_2 = 3.27442

J = 1.31677
K = 1.73387
L = 2.28310
M = 3.00631
N = 3.95861

P = 0.75944
Q = 0.57674
R = 0.43800
S = 0.33263

$$\frac{N_2+1}{N_1+1}^{1} - J = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{2} - K = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{3} - L = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{4} - M = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{5} - N = 0.00000$$

$$\frac{N_2+1}{N_1+1}^{-1} - P = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{-2} - Q = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{-3} - R = 0.00000$$
$$\frac{N_2+1}{N_1+1}^{-4} - S = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2} = 0.83725$$

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot N_2+N_1} = 1.12397$$

A = 0.83725
B = 0.94105
C = 1.05771
D = 1.18884
E = 1.33622

F = 0.74490
G = 0.66274
H = 0.58964
I = 0.52461

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{0}}{N_1\cdot N_2+N_1} - A = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{1}}{N_1\cdot N_2+N_1} - B = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{2}}{N_1\cdot N_2+N_1} - C = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{3}}{N_1\cdot N_2+N_1} - D = 0.00000$$

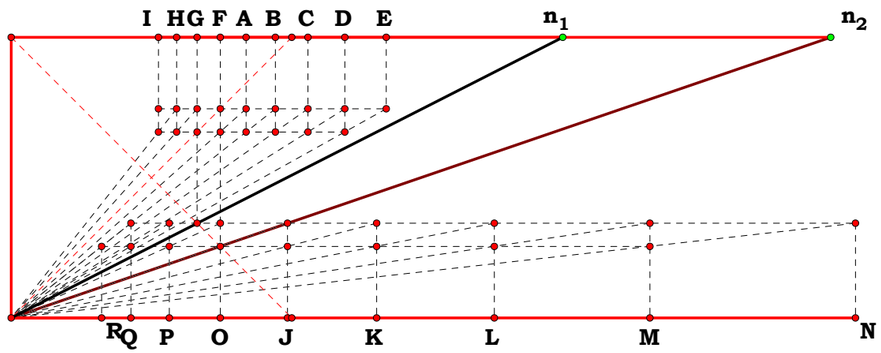
$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{4}}{N_1\cdot N_2+N_1} - E = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-1}}{N_1\cdot N_2+N_1} - F = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-2}}{N_1\cdot N_2+N_1} - G = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-3}}{N_1\cdot N_2+N_1} - H = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-4}}{N_1\cdot N_2+N_1} - I = 0.00000$$



$$\frac{N_2}{N_1+1} = 0.98482$$

$$\frac{N_2+1}{N_1+1} = 1.32208$$

N_1 = 1.96510
N_2 = 2.92011

J = 0.98482
K = 1.30202
L = 1.72138
M = 2.27580
N = 3.00879

O = 0.74490
P = 0.56343
Q = 0.42617
R = 0.32235

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{0}}{N_1+1} - J = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{1}}{N_1+1} - K = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{2}}{N_1+1} - L = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{3}}{N_1+1} - M = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{4}}{N_1+1} - N = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-1}}{N_1+1} - O = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-2}}{N_1+1} - P = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-3}}{N_1+1} - Q = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{-4}}{N_1+1} - R = 0.00000$$

B = 1.31080
C = 1.71820
D = 2.25222
E = 2.95221
F = 3.86977
G = 5.07250

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)} = 1.31080 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{1} - B = 0.00000$$

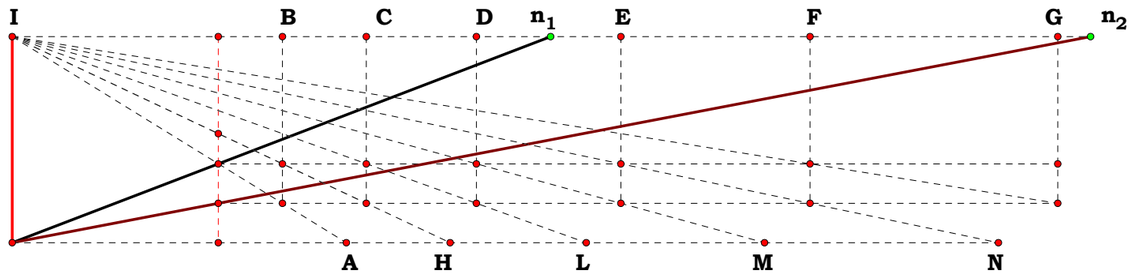
$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2} = 1.71820 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2} - C = 0.00000$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3} = 2.25222 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3} - D = 0.00000$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{4} = 2.95221 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{4} - E = 0.00000$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{5} = 3.86977 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{5} - F = 0.00000$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{6} = 5.07250 \qquad \frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{6} - G = 0.00000$$



$$\frac{N_1}{N_1-1} - A = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2} = 2.12423$$

N_1 = 2.61146
N_2 = 5.23175

A = 1.62056
H = 2.12423
L = 2.78444
M = 3.64985
N = 4.78423

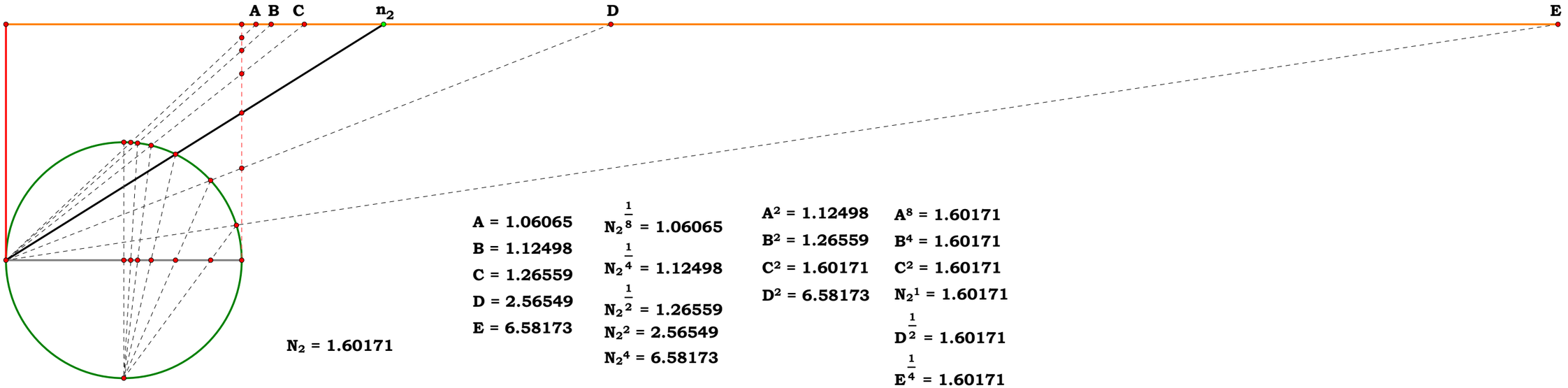
$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{-1} = 1.62056 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{-1}\right) - A = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{0} = 2.12423 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{0}\right) - H = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{1} = 2.78444 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{1}\right) - L = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2} = 3.64985 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2}\right) - M = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3} = 4.78423 \qquad \left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3}\right) - N = 0.00000$$



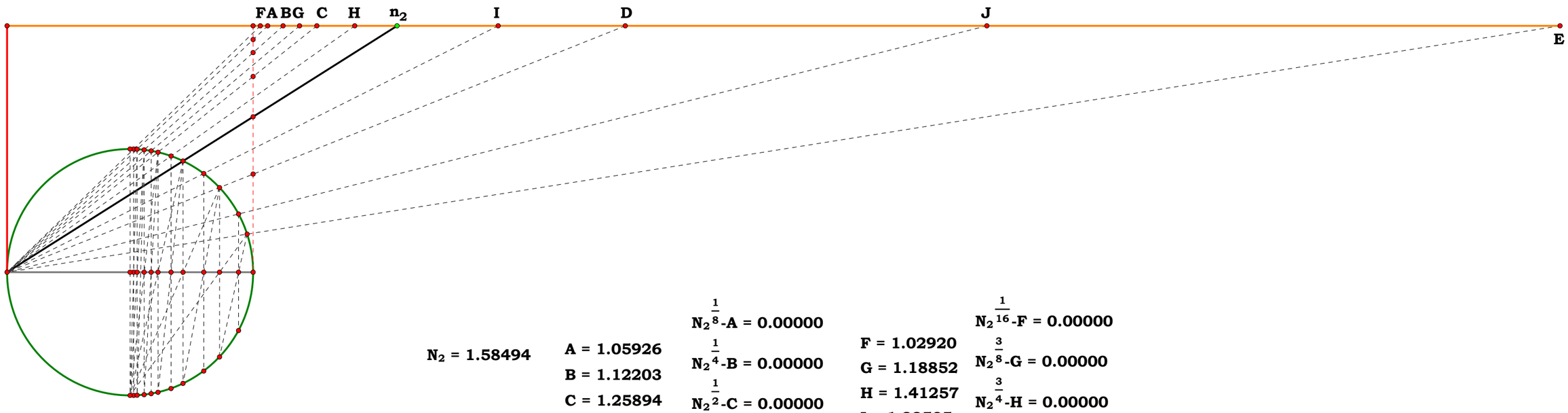
$N_2 = 1.60171$

$A = 1.06065$
$B = 1.12498$
$C = 1.26559$
$D = 2.56549$
$E = 6.58173$

$N_2^{\frac{1}{8}} = 1.06065$
$N_2^{\frac{1}{4}} = 1.12498$
$N_2^{\frac{1}{2}} = 1.26559$
$N_2^{2} = 2.56549$
$N_2^{4} = 6.58173$

$A^2 = 1.12498$
$B^2 = 1.26559$
$C^2 = 1.60171$
$D^2 = 6.58173$

$A^8 = 1.60171$
$B^4 = 1.60171$
$C^2 = 1.60171$
$N_2^{1} = 1.60171$
$D^{\frac{1}{2}} = 1.60171$
$E^{\frac{1}{4}} = 1.60171$



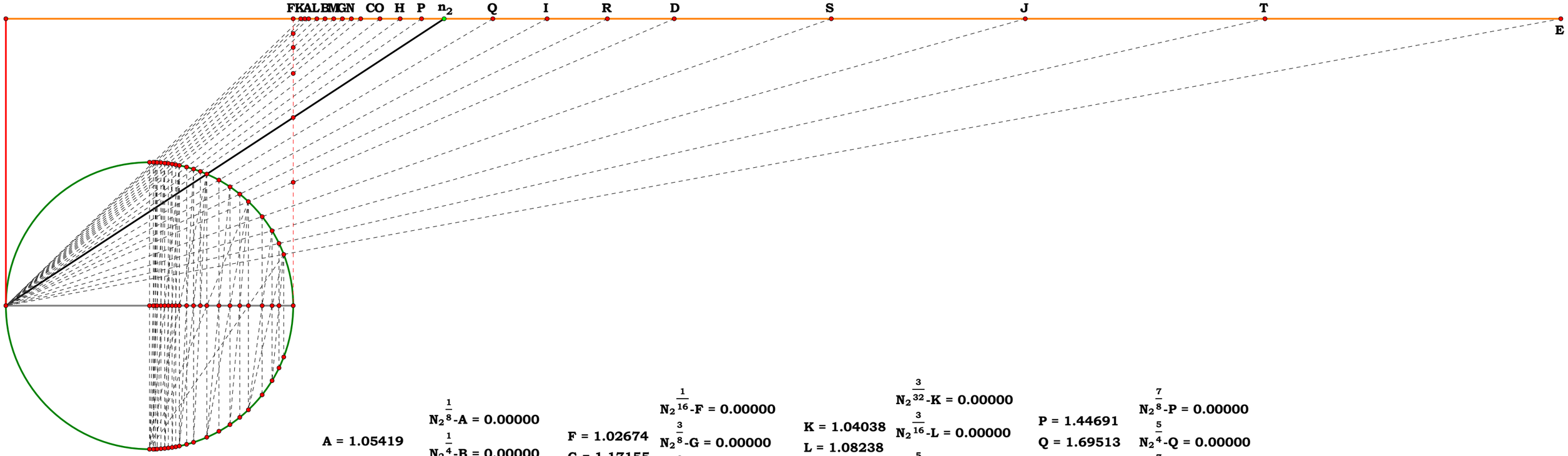
$N_2 = 1.58494$

$A = 1.05926$
$B = 1.12203$
$C = 1.25894$
$D = 2.51204$
$E = 6.31034$

$N_2^{\frac{1}{8}}\text{-}A = 0.00000$
$N_2^{\frac{1}{4}}\text{-}B = 0.00000$
$N_2^{\frac{1}{2}}\text{-}C = 0.00000$
$N_2^{2}\text{-}D = 0.00000$
$N_2^{4}\text{-}E = 0.00000$

$F = 1.02920$
$G = 1.18852$
$H = 1.41257$
$I = 1.99535$
$J = 3.98144$

$N_2^{\frac{1}{16}}\text{-}F = 0.00000$
$N_2^{\frac{3}{8}}\text{-}G = 0.00000$
$N_2^{\frac{3}{4}}\text{-}H = 0.00000$
$N_2^{\frac{3}{2}}\text{-}I = 0.00000$
$N_2^{3}\text{-}J = 0.00000$



$N_2 = 1.52533$

A = 1.05419
B = 1.11132
C = 1.23504
D = 2.32662
E = 5.41318

$N_2^{\frac{1}{8}}$-A = 0.00000
$N_2^{\frac{1}{4}}$-B = 0.00000
$N_2^{\frac{1}{2}}$-C = 0.00000
N_2^{2}-D = 0.00000
N_2^{4}-E = 0.00000

F = 1.02674
G = 1.17155
H = 1.37253
I = 1.88384
J = 3.54886

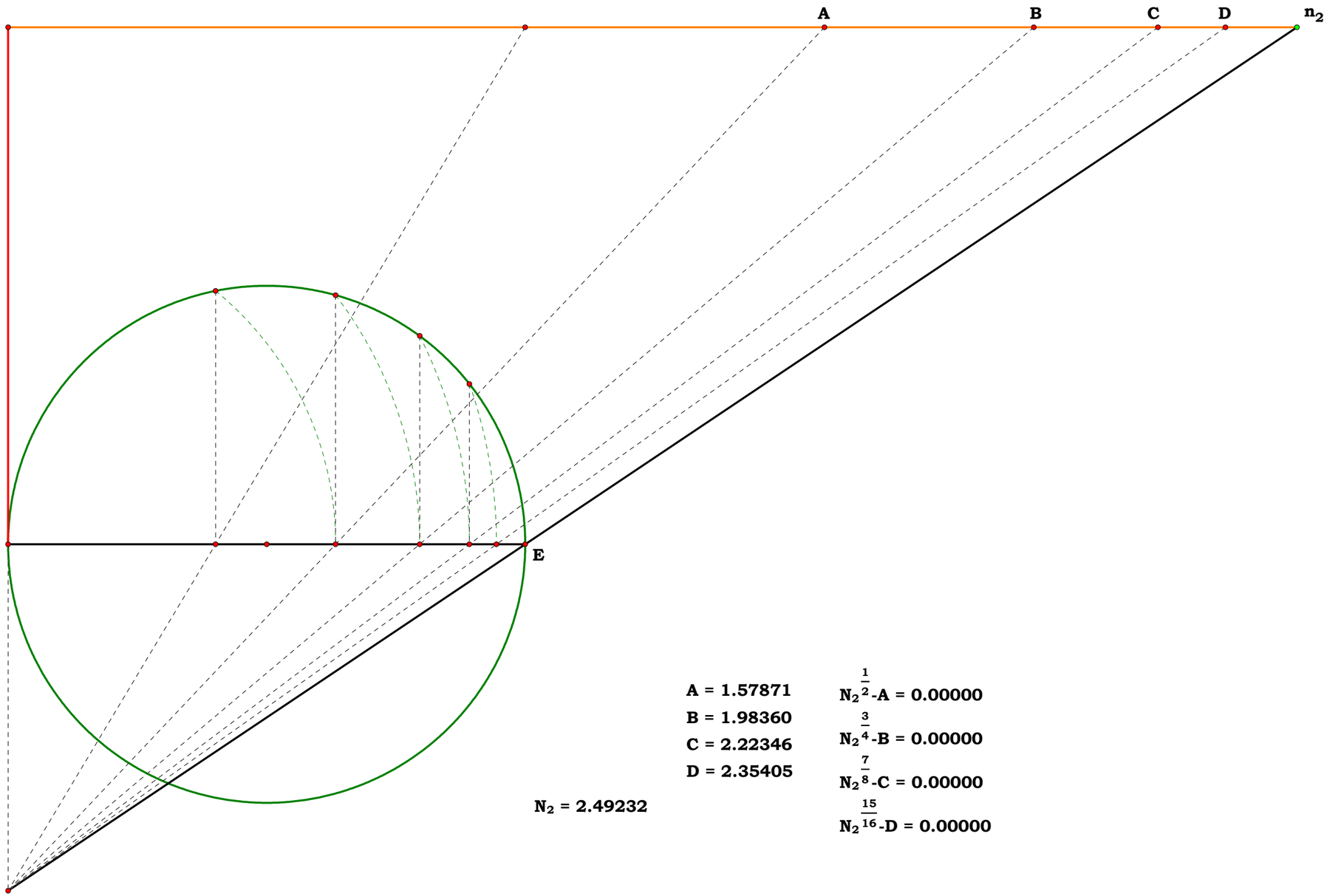
$N_2^{\frac{1}{16}}$-F = 0.00000
$N_2^{\frac{3}{8}}$-G = 0.00000
$N_2^{\frac{3}{4}}$-H = 0.00000
$N_2^{\frac{3}{2}}$-I = 0.00000
N_2^{3}-J = 0.00000

K = 1.04038
L = 1.08238
M = 1.14104
N = 1.20288
O = 1.30197

$N_2^{\frac{3}{32}}$-K = 0.00000
$N_2^{\frac{3}{16}}$-L = 0.00000
$N_2^{\frac{5}{16}}$-M = 0.00000
$N_2^{\frac{7}{16}}$-N = 0.00000
$N_2^{\frac{5}{8}}$-O = 0.00000

P = 1.44691
Q = 1.69513
R = 2.09356
S = 2.87348
T = 4.38299

$N_2^{\frac{7}{8}}$-P = 0.00000
$N_2^{\frac{5}{4}}$-Q = 0.00000
$N_2^{\frac{7}{4}}$-R = 0.00000
$N_2^{\frac{5}{2}}$-S = 0.00000
$N_2^{\frac{7}{2}}$-T = 0.00000



A = 1.57871
B = 1.98360
C = 2.22346
D = 2.35405

N_2 = 2.49232

$N_2^{\frac{1}{2}}$-A = 0.00000
$N_2^{\frac{3}{4}}$-B = 0.00000
$N_2^{\frac{7}{8}}$-C = 0.00000
$N_2^{\frac{15}{16}}$-D = 0.00000

Introduction to Fractional Series.

Circle

Show Lines

0

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

0

1

2

3

4

5

6

7

8

9

10

11

12

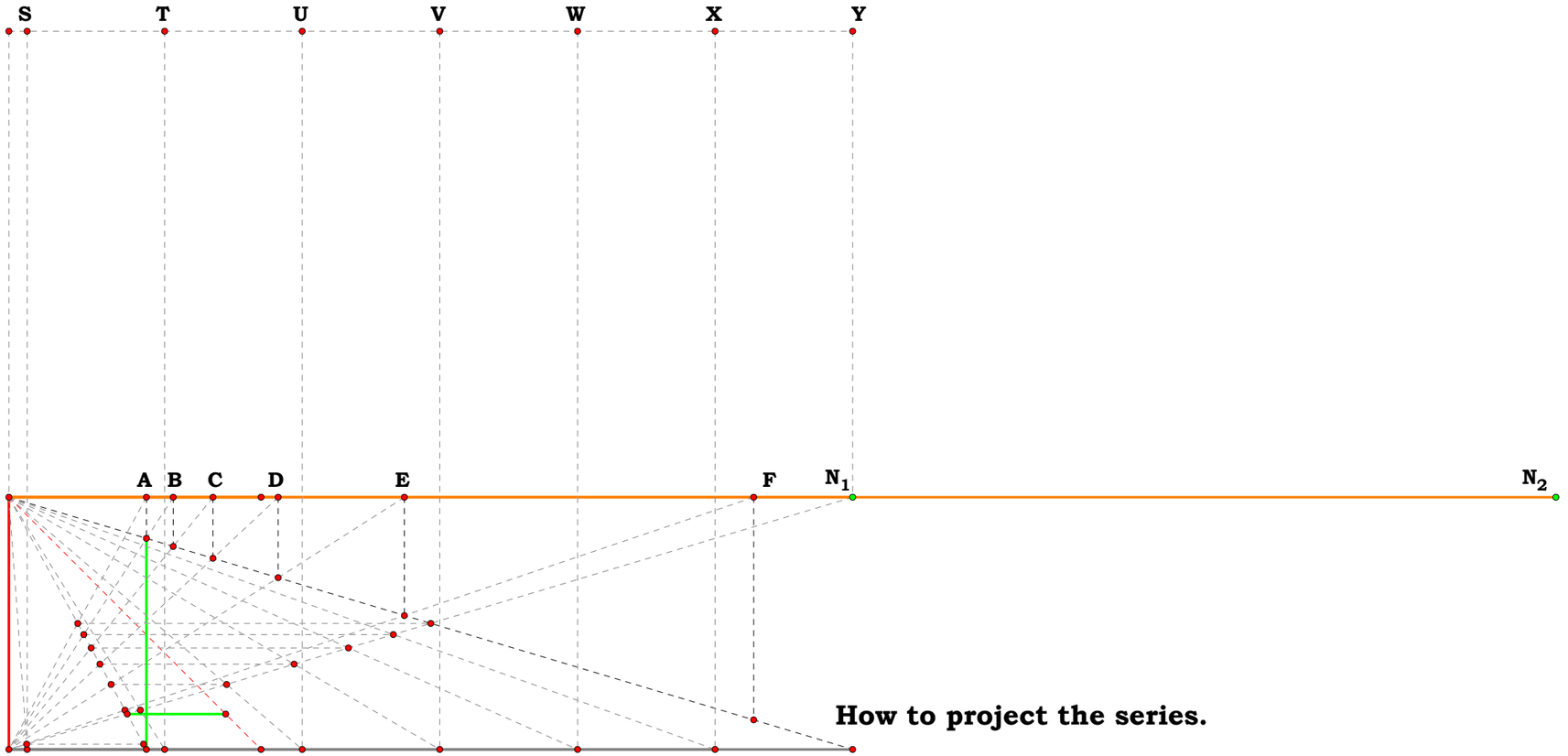
13

14

15

Show Segment

Hide Segment



$N_1 = 3.34477$

$N_2 = 6.13288$

How to project the series.

Points

Present 2 Actions

Sequence 14 Actions

$\frac{N_1}{N_2} = 0.54538$

$\frac{2 \cdot N_1}{N_2} = 1.09077$

$\frac{3 \cdot N_1}{N_2} = 1.63615$

$\frac{4 \cdot N_1}{N_2} = 2.18153$

$x_S = 0.07247$

$x_T = 0.61785$

$x_U = 1.16324$

$x_V = 1.70862$

$x_W = 2.25400$

$x_X = 2.79939$

$x_Y = 3.34477$

Circle
Show Lines
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Fractional series created where the starting value is N_1/N_2

Option Base of Index is 0.

$\frac{N_1}{N_2\text{-}0} = 0.66667$

$\frac{N_1}{N_2\text{-}1} = 0.80000$

$\frac{N_1}{N_2\text{-}2} = 1.00000$

$\frac{A}{N_1} = 0.16667$

$\frac{B}{N_1} = 0.20000$

$\frac{C}{N_1} = 0.25000$

$\frac{D}{N_1} = 0.33333$

$\frac{1}{N_2\text{-}0} = 0.16667$

$\frac{1}{N_2\text{-}1} = 0.20000$

$\frac{1}{N_2\text{-}2} = 0.25000$

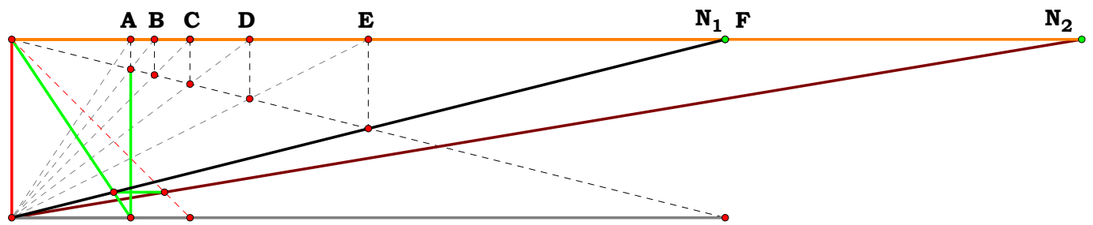
$\frac{1}{N_2\text{-}3} = 0.33333$

$\frac{\frac{N_1}{N_2\text{-}0}}{\frac{1}{N_2\text{-}0}} = 4.00000$

$\frac{\frac{N_1}{N_2\text{-}1}}{\frac{1}{N_2\text{-}1}} = 4.00000$

$N_2\text{-}I_1 = 0.00000$

$I_1 = 6$



$N_1 = 4.00000$

$N_2 = 6.00000$

$A = 0.66667$

$B = 0.80000$

$C = 1.00000$

$D = 1.33333$

$E = 2.00000$

$F = 4.00000$

Points

Hide Segments

Present 2 Actions

Present 4 Actions

Sequence 14 Actions

Hide Action Buttons

$\frac{N_1}{N_2} = 0.66667$

$\frac{N_1}{N_2}\text{-}A = 0.00000$

$\frac{1}{(N_2\text{-}I_1)} = -1.73215 \cdot 10^{13}$

$\frac{1}{(N_2\text{-}I_1)} \cdot N_1 = -6.92861 \cdot 10^{13}$

Option Base of Index is 0.

$N_1 = 7.15170$ $I_1 = 3$

$N_2 = 3.00000$

$N_3 = 2.00000$

$N_1 \cdot N_3 + N_1 = 21.45511$

$N_2 \cdot N_3 + N_2 = 9.00000$

Total number of indexes.

$(N_3+1)\cdot(N_2-1) = 6.00000$

$iT_1 = 6$

Fraction at last index.

$$\frac{N_1 \cdot N_3 + N_1}{(N_2 \cdot N_3 + N_2) - iT_1} = 7.15170$$

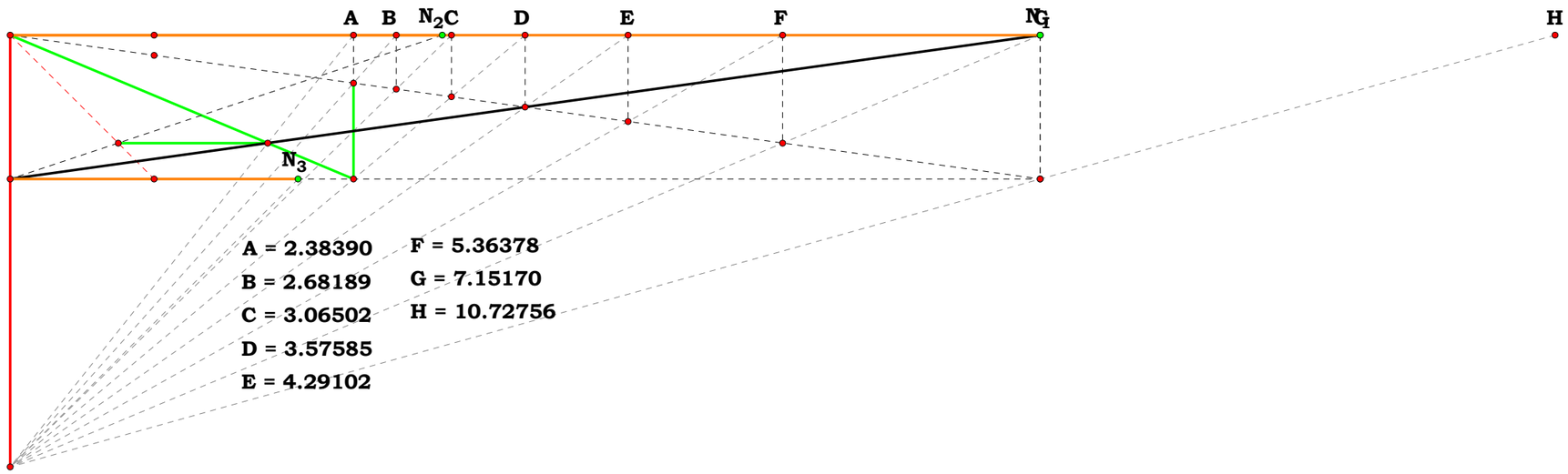
$$\frac{N_1 \cdot N_3 + N_1}{(N_2 \cdot N_3 + N_2) - iT_1} - N_1 = 0.00000$$

Starting Fraction.

$$\frac{(N_1 \cdot N_3 + N_1)}{(N_2 \cdot N_3 + N_2)} = 2.38390$$

Fraction at index

$$\frac{N_1 \cdot N_3 + N_1}{(N_2 \cdot N_3 + N_2) - I_1} = 3.57585$$



A = 2.38390

B = 2.68189

C = 3.06502

D = 3.57585

E = 4.29102

F = 5.36378

G = 7.15170

H = 10.72756

Fractional series where the starting value is N_1N_2/N_1N_2.

$\frac{N_1}{A} = 6.72867$ $\quad \frac{N_1}{F} = 1.00000$

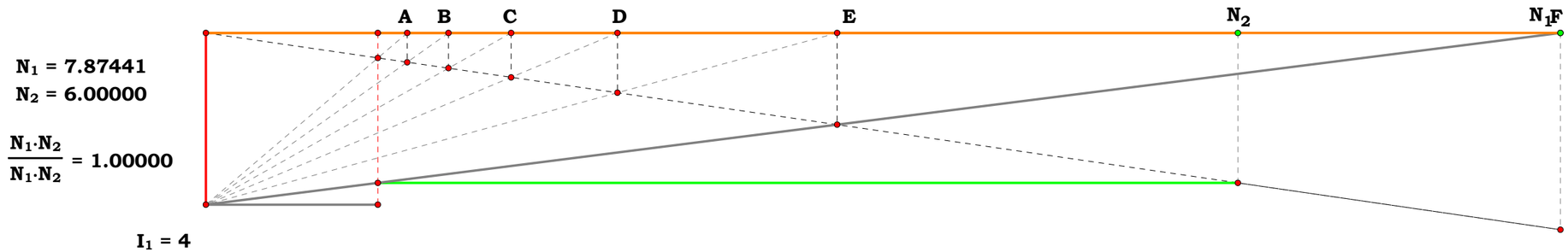
$\frac{N_1}{B} = 5.58294$

$\frac{N_1}{C} = 4.43720$

$\frac{N_1}{D} = 3.29147$

$\frac{N_1}{E} = 2.14573$

Option Base of Index is 1



$N_1 = 7.87441$

$N_2 = 6.00000$

$\frac{N_1 \cdot N_2}{N_1 \cdot N_2} = 1.00000$

$I_1 = 4$

$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2 - I_1 \cdot (N_1 - 1))} = 2.39237$

$N_1 \cdot N_2 = 47.24644$

$N_1 \cdot N_2 - I_1 \cdot (N_1 - 1) = 19.74881$

$\frac{(N_1 \cdot N_2)}{(N_1 \cdot N_2)} = 1.00000$

$A = 1.17028$
$B = 1.41044$
$C = 1.77463$
$D = 2.39237$
$E = 3.66980$

$F = 7.87441$

Starting values. See previous plate.

$\frac{N_1 \cdot N_2}{N_1 \cdot N_2} = 1.00000$ $\frac{N_1 \cdot N_3}{N_1 \cdot N_3} = 1.00000$ $N_2 \cdot N_3 = 40.00000$ $N_2 - N_3 = 3.00000$

Option Base of Index is 1

$N_1 = 6.78917$ $I_1 = 8$

$N_2 = 8.00000$

$N_3 = 5.00000$

Total Number of Indexs.

$\frac{N_2 \cdot N_3}{N_2 - N_3} = 13.33333$ $iT_1 = 13.33333$

Fraction at Index.

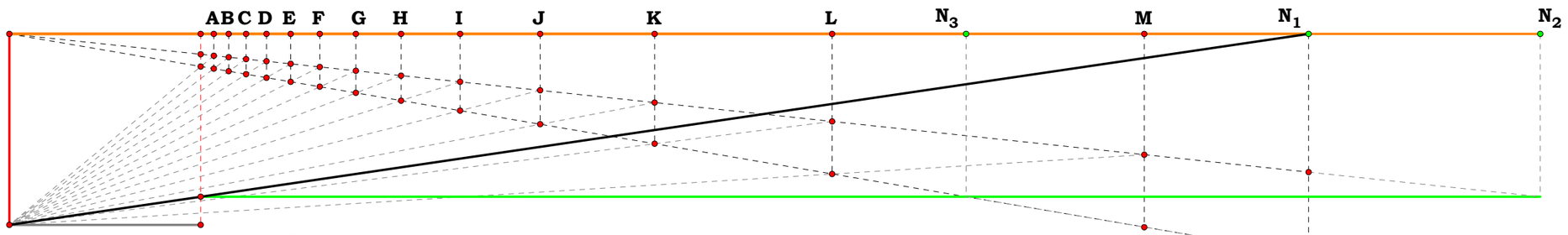
$\frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - I_1 \cdot (N_1 - 1) \cdot (N_2 - N_3)} = 2.04760$

N_1 minus last index.

$\frac{N_1 \cdot N_2 \cdot N_3}{N_1 \cdot N_2 \cdot N_3 - iT_1 \cdot (N_1 - 1) \cdot (N_2 - N_3)} - N_1 = 0.00000$

Number of times fraction at index divides N_1

$\frac{N_1 \cdot (N_1 \cdot N_2 \cdot N_3 - I_1 \cdot (N_1 - 1) \cdot (N_2 - N_3))}{N_1 \cdot N_2 \cdot N_3} = 3.31567$



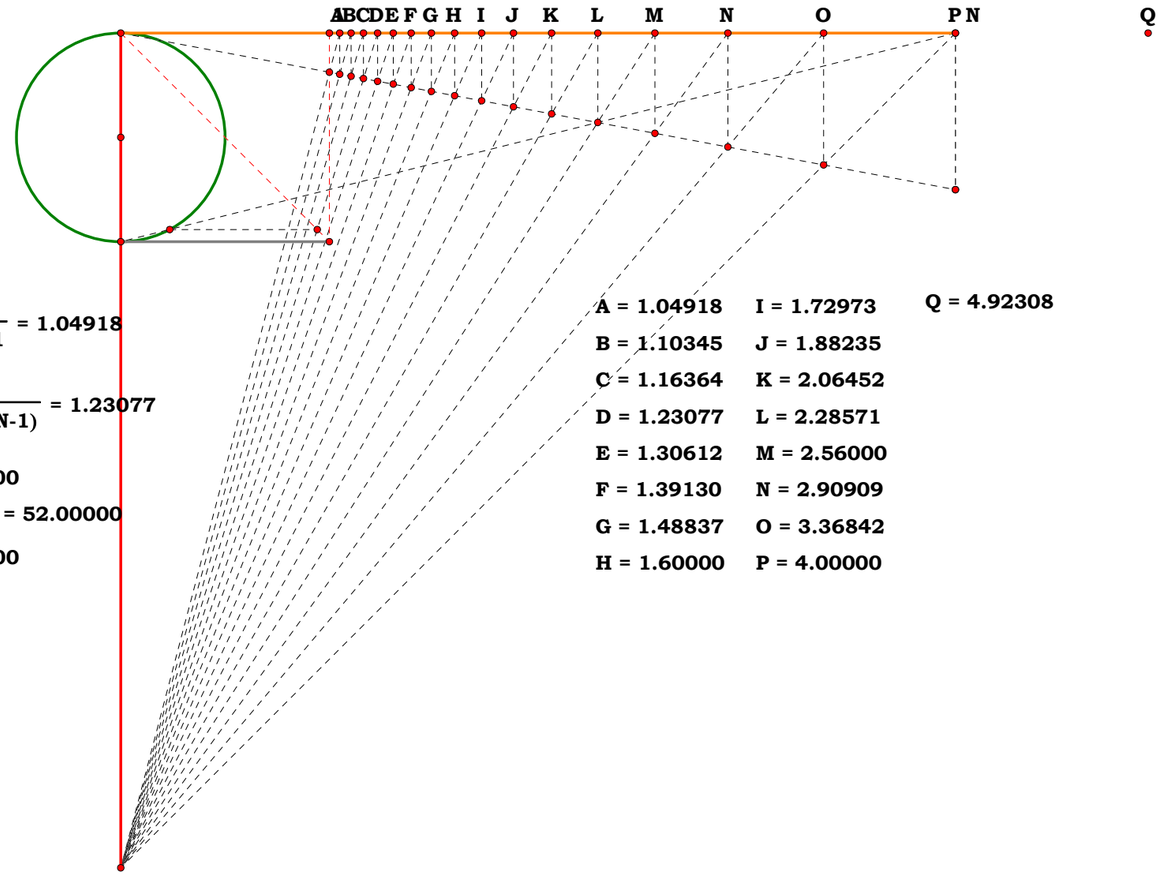
A = 1.06832
B = 1.14667
C = 1.23741
D = 1.34375
E = 1.47008
F = 1.62263
G = 1.81052
H = 2.04760
I = 2.35614
J = 2.77416
K = 3.37249
L = 4.29989
M = 5.93081

Exponential Fractional Series:

N -> 0
N -> 1
N -> 2
N -> 3
N -> 4
N -> 5
N -> 6
N -> 7
N -> 8
N -> 9
N -> 10
N -> 11

N = 4.00000

Show Objects



In_{dx} = 4

$$\frac{N^3}{(N^3-N)+1} = 1.04918$$

$$\frac{N^3}{N^3-In_{dx}\cdot(N-1)} = 1.23077$$

N^3 = 64.00000

$N^3-In_{dx}\cdot(N-1)$ = 52.00000

N^2 = 16.00000

A = 1.04918
B = 1.10345
C = 1.16364
D = 1.23077
E = 1.30612
F = 1.39130
G = 1.48837
H = 1.60000
I = 1.72973
J = 1.88235
K = 2.06452
L = 2.28571
M = 2.56000
N = 2.90909
O = 3.36842
P = 4.00000
Q = 4.92308

Free proportionals from start to finish.

Circle | Points
Show Lines | Hide Objects

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Circle | Points
Show Lines | Hide Objects

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Circle | Points
Show Lines | Hide Objects

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Circle | Points
Show Lines

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

$N_1 = 5.00000$

$N_2 = 0.00000$

$n_a = 7.00000$

$n_b = 5.00000$

$r_{da} = 1.40000$

$\frac{n_a}{n_b} = 1.40000$

$N_1 \cdot \frac{n_a}{n_b} = 7.00000$

$n_c = 3.00000$

$n_d = 4.00000$

$r_{db} = 0.75000$

$\frac{n_c}{n_d} = 0.75000$

$\frac{n_c}{n_d} \cdot N_1 = 3.75000$

$In_{dx} = 0$

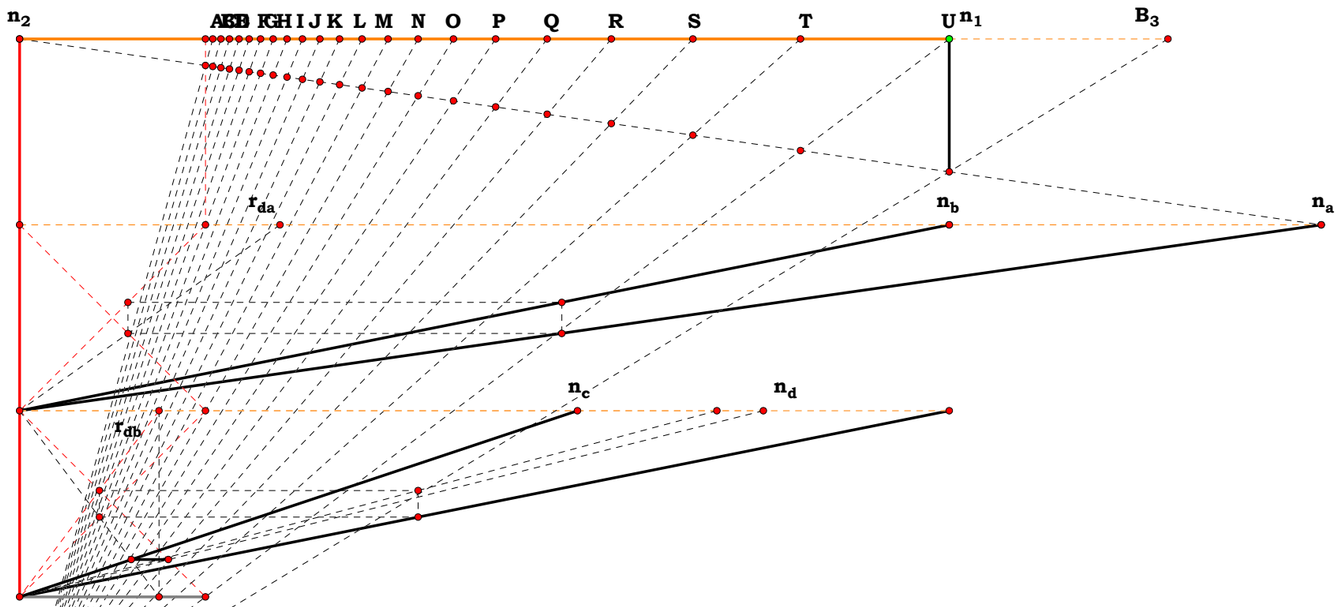
$\frac{26.25000}{26.25000} = 1.00000$

$B_3 = 6.17647$

$\frac{N_1}{B_3 - N_1} + 1 = 5.25000$

$\frac{7}{3.75} = 1.86667$

A = 1.03960
B = 1.08247
C = 1.12903
D = 1.17978
E = 1.23529
F = 1.29630
G = 1.36364
H = 1.43836
I = 1.52174
J = 1.61538
K = 1.72131
L = 1.84211
M = 1.98113
N = 2.14286
O = 2.33333
P = 2.56098
Q = 2.83784
R = 3.18182
S = 3.62069
T = 4.20000
U = 5.00000



$\frac{N_1^2 \cdot n_a \cdot n_c}{N_1^2 \cdot n_a \cdot n_c - In_{dx} \cdot n_b \cdot n_d} = 1.00000$

$\frac{n_a \cdot n_c \cdot N_1^2}{n_b \cdot n_d} = 26.25000$

$\frac{n_a \cdot n_c \cdot N_1^2}{n_b \cdot n_d} - In_{dx} = 26.25000$

$N_1^2 - N_1 = 20.00000$

$N_1^2 \cdot n_a \cdot n_c = 525.00000$

$N_1^2 \cdot n_b \cdot n_d = 500.00000$

$\frac{(N_1^2 - N_1) \cdot n_a \cdot n_c}{n_b \cdot n_d} = 21.00000$

Circle | Points | Circle | Points | Circle | Points

Show Lines | Hide Objects | Show Lines | Hide Objects | Show Lines

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

$N_1 = 5.00000$

$N_2 = 0.00000$

$n_a = 7.00000$

$n_b = 5.00000$

$r_{da} = 1.40000$

$\frac{n_a}{n_b} = 1.40000$

$N_1 \cdot \frac{n_a}{n_b} = 7.00000$

$n_c = 3.00000$

$n_d = 4.00000$

$r_{db} = 0.75000$

$\frac{n_c}{n_d} = 0.75000$

$\frac{n_c}{n_d} \cdot N_1 = 3.75000$

$In_{dx} = 0$

$\frac{26.25000}{26.25000} = 1.00000$

$B_3 = 6.17647$

$\frac{N_1}{B_3 - N_1} + 1 = 5.25000$

$\frac{7}{3.75} = 1.86667$

A = 1.03960
B = 1.08247
C = 1.12903
D = 1.17978
E = 1.23529
F = 1.29630
G = 1.36364
H = 1.43836
I = 1.52174
J = 1.61538
K = 1.72131
L = 1.84211
M = 1.98113
N = 2.14286
O = 2.33333
P = 2.56098
Q = 2.83784
R = 3.18182
S = 3.62069
T = 4.20000
U = 5.00000

$26.25+5.25 = 31.50000$

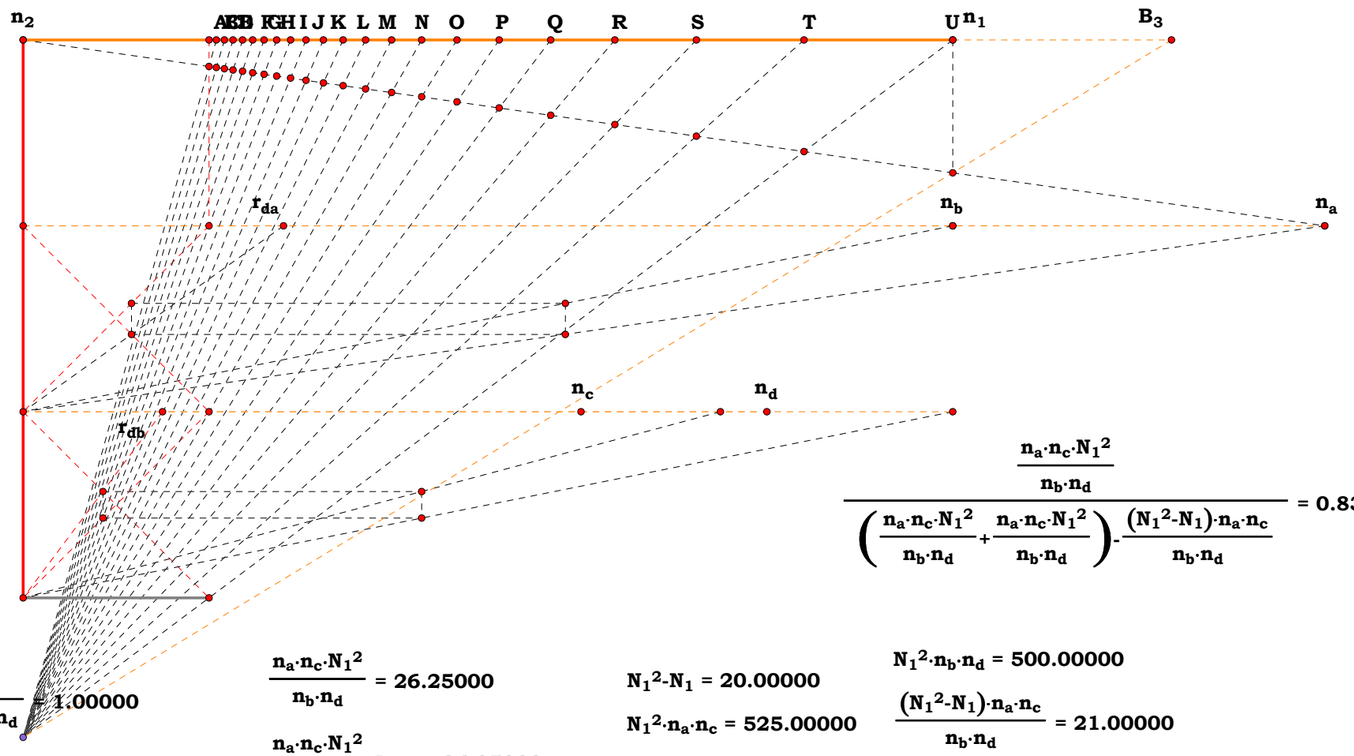
$25.25+6.25 = 31.50000$

$24.25+7.25 = 31.50000$

$\frac{26.25}{(26.25+5.25)} = 0.83333$

$\frac{26.25}{(25.25+6.25)} = 0.83333$

$\frac{26.25}{(24.25+7.25)} = 0.83333$



$\frac{N_1^2 \cdot n_a \cdot n_c}{N_1^2 \cdot n_a \cdot n_c - In_{dx} \cdot n_b \cdot n_d} = 1.00000$

$\frac{n_a \cdot n_c \cdot N_1^2}{n_b \cdot n_d} = 26.25000$

$\frac{n_a \cdot n_c \cdot N_1^2}{n_b \cdot n_d} - In_{dx} = 26.25000$

$N_1^2 - N_1 = 20.00000$

$N_1^2 \cdot n_a \cdot n_c = 525.00000$

$N_1^2 \cdot n_b \cdot n_d = 500.00000$

$\frac{(N_1^2 - N_1) \cdot n_a \cdot n_c}{n_b \cdot n_d} = 21.00000$

$\frac{\frac{n_a \cdot n_c \cdot N_1^2}{n_b \cdot n_d}}{\left(\frac{n_a \cdot n_c \cdot N_1^2}{n_b \cdot n_d} + \frac{n_a \cdot n_c \cdot N_1^2}{n_b \cdot n_d}\right) - \frac{(N_1^2 - N_1) \cdot n_a \cdot n_c}{n_b \cdot n_d}} = 0.83333$

$\frac{N_1}{N_1 + 1} = 0.83333$

$\frac{m_3}{m_3 - 1} = 1.03960$

Recursing from a series itself.

Circle
Show Lines
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
Hide Objects
Hide Objects
Hide Objects
Hide Objects
Hide Objects
$N_1 = 4.00000$
Points

$N_1 = 4.00000$

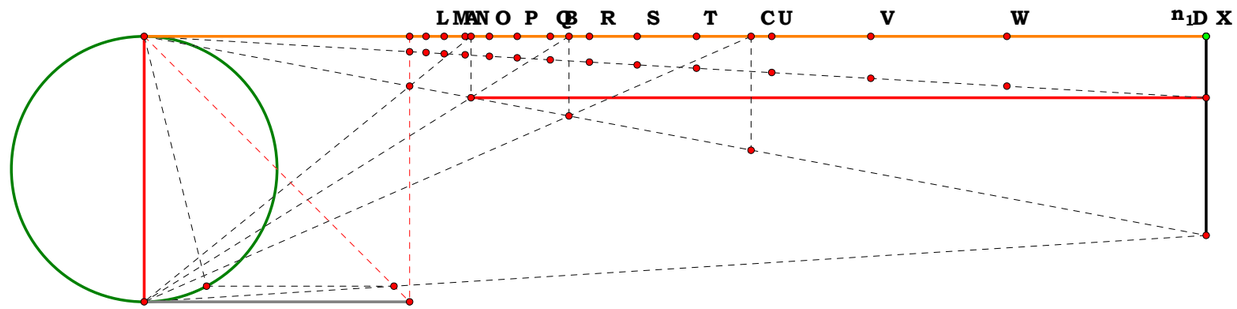
$$\frac{N_1^2}{N_1^2 - I_{ndx}\cdot(N_1-1)} = 4.00000$$

$I_{ndx} = 4$

$N_1\cdot(N_1-1)+1 = 13.00000$

$$\frac{N_1^3 - N_1\cdot(N_1-1)}{N_1^3 - (N_1-1)\cdot(N_1+I_{ndx})} = 1.30000$$

L = 1.06122
M = 1.13043
N = 1.20930
O = 1.30000
P = 1.40541
Q = 1.52941
R = 1.67742
S = 1.85714
T = 2.08000
U = 2.36364
V = 2.73684
W = 3.25000
X = 4.00000



A = 1.23077
B = 1.60000
C = 2.28571
D = 4.00000

Circle
Show Lines
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

$N_1 = 6.00000$

Points

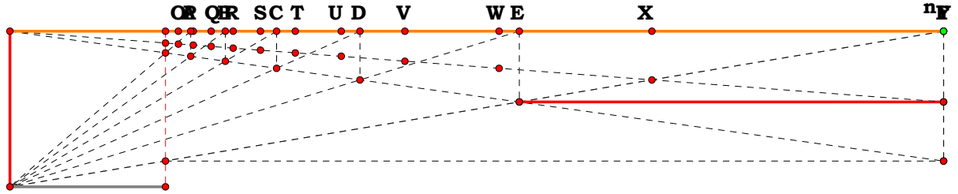
$I_{ndx} = 3$

$$\frac{N_1^2}{N_1^2 - I_{ndx} \cdot (N_1 - 1)} = 1.71429$$

$$\frac{2 \cdot N_1^2 - N_1}{(2 \cdot N_1^2 - I_{ndx} \cdot N_1 - N_1) + I_{ndx}} = 1.29412$$

Hide Objects
Hide Objects
Hide Objects
Show Objects

O = 1.08197
P = 1.17857
Q = 1.29412
R = 1.43478
S = 1.60976
T = 1.83333
U = 2.12903
V = 2.53846
W = 3.14286
X = 4.12500
Y = 6.00000
Z = 11.00000
$x_{A_1} = 66.00000$
$x_{B_1} = -16.50000$
$x_{C_1} = -7.33333$
$x_{D_1} = -4.71429$
$x_{E_1} = -3.47368$
$x_{F_1} = -2.75000$
$x_{G_1} = -2.27586$



A = 1.16129
B = 1.38462
C = 1.71429
D = 2.25000
E = 3.27273
F = 6.00000
G = 36.00000

Circle
Show Lines
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

$N_1 = 5.00000$

Points

Circle
Show Lines
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

$n_3 = 4.00000$

Points

$I_{ndx} = 3$

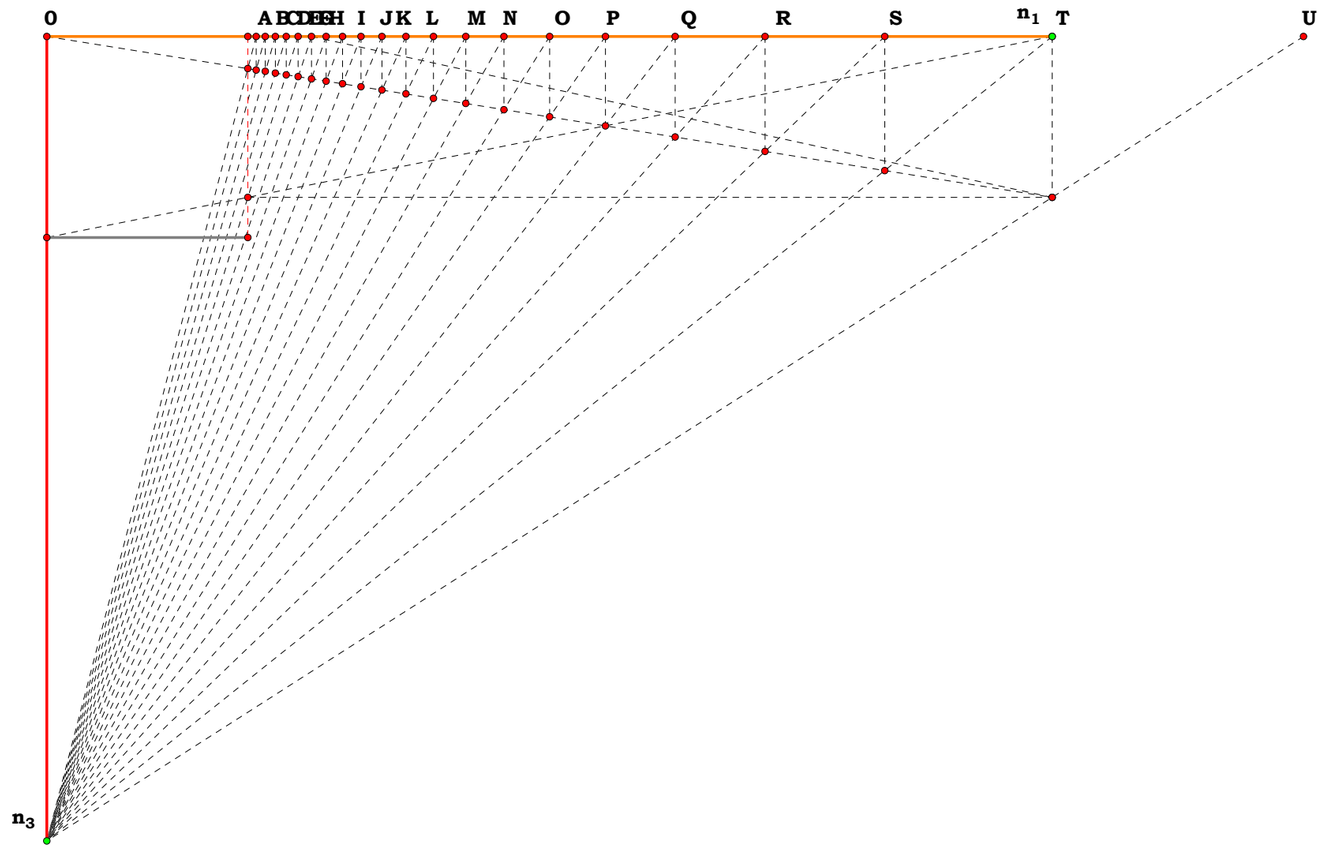
$N_1 \cdot n_3 = 20.00000$

$N_1^2 \cdot n_3 = 100.00000$

$N_1^2 \cdot n_3 - I_{ndx} \cdot (N_1 - 1) = 88.00000$

$$\frac{(N_1^2 \cdot n_3)}{(N_1^2 \cdot n_3 - I_{ndx} \cdot (N_1 - 1))} = 1.13636$$

A = 1.04167
B = 1.08696
C = 1.13636
D = 1.19048
E = 1.25000
F = 1.31579
G = 1.38889
H = 1.47059
I = 1.56250
J = 1.66667
K = 1.78571
L = 1.92308
M = 2.08333
N = 2.27273
O = 2.50000
P = 2.77778
Q = 3.12500
R = 3.57143
S = 4.16667
T = 5.00000
U = 6.25000



Projecting a fractional series.

Projecting the series produces even divisions often with a remainder.

Index is Base 0

Indexs: $I_{ndx} = 8$ $C_{indx} = 1.00000$

Number of div. by difference at an index.

$$\frac{(I_{ndx} \cdot N_2 - N_1 \cdot N_3) \cdot ((I_{ndx} \cdot N_2 + N_2) - N_1 \cdot N_3)}{N_1 \cdot N_2} = 0.00000$$

Total number of fractions.

$$\frac{N_1 \cdot N_3}{N_2} = 9.00000 \qquad \frac{N_1 \cdot N_3}{N_2} = 9.00000$$

Fraction at Index:

Num: $N_1 \cdot N_3 - I_{ndx} \cdot N_2 = 2.00000$

Den: $N_1 = 3.00000$

$$\frac{(N_1 \cdot N_3 - I_{ndx} \cdot N_2)}{N_1} = 0.66667$$

Fraction at Compliment:

$$\frac{N_1 \cdot N_3 - C_{indx} \cdot N_2}{N_1} = 5.33333$$

$$\frac{(N_1 \cdot N_3 - I_{ndx} \cdot N_2)}{N_1} + \frac{N_1 \cdot N_3 - C_{indx} \cdot N_2}{N_1} = 6.00000$$

N[1] -> 0 … N[1] -> 11

N[2] -> 0 … N[2] -> 11

$N_1 = 3.00000$

$N_2 = 2.00000$

$N_3 = 6.00000$

Present 2 Actions

$$\frac{N_3}{N_3+1} = 0.85714$$

$\frac{N_3}{1} = 6.00000$

$\frac{N_3}{A} = 5.33333$

$\frac{N_3}{B} = 4.66667$

$\frac{N_3}{C} = 4.00000$

$\frac{N_3}{D} = 3.33333$

$\frac{N_3}{E} = 2.66667$

$\frac{N_3}{F} = 2.00000$

$\frac{N_3}{G} = 1.33333$

$O_2 = 6.00000$ $I_2 = 2.00000$

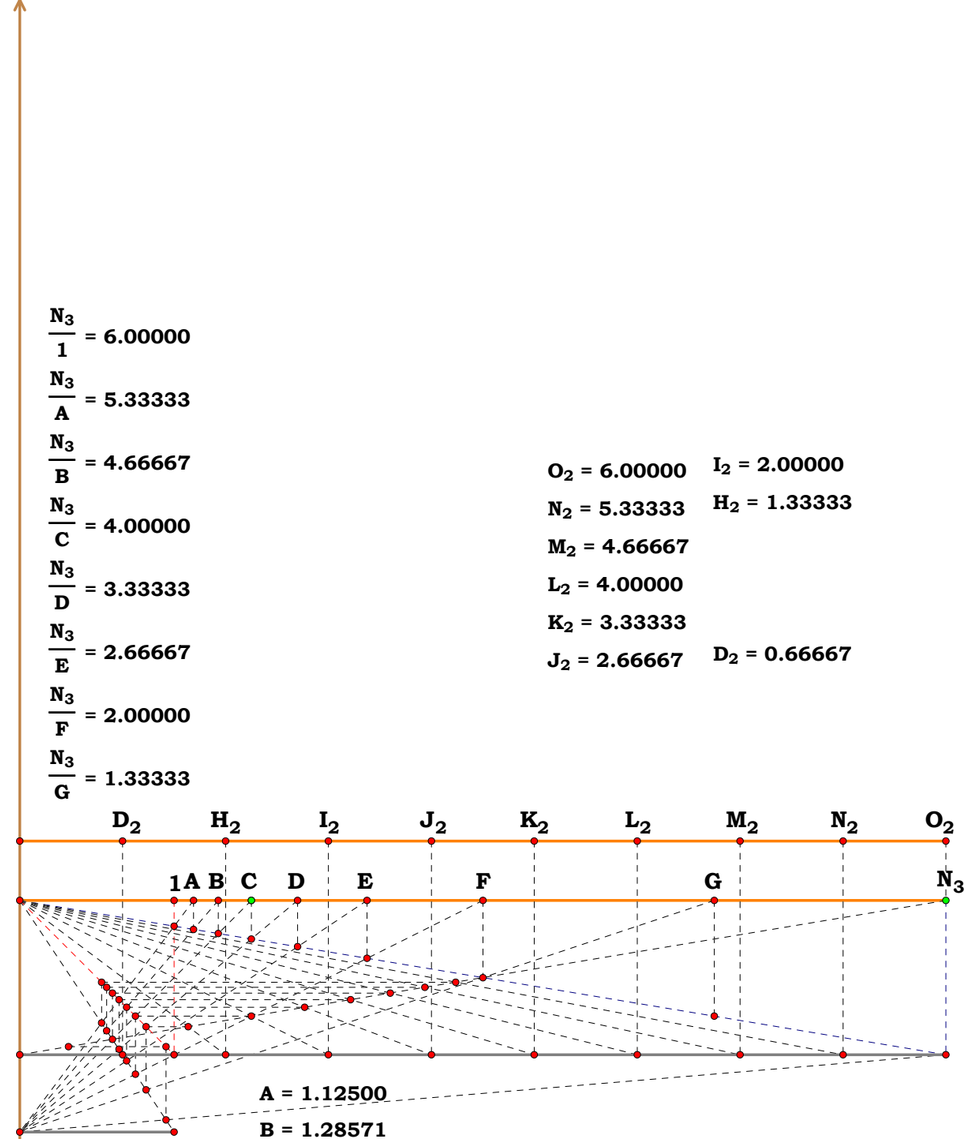
$N_2 = 5.33333$ $H_2 = 1.33333$

$M_2 = 4.66667$

$L_2 = 4.00000$

$K_2 = 3.33333$

$J_2 = 2.66667$ $D_2 = 0.66667$



A = 1.12500

B = 1.28571

C = 1.50000

D = 1.80000

E = 2.25000

F = 3.00000

G = 4.50000

Indexs:

Index = 2 C_{indx} = 7.00

Number of div. by difference at an index.

$$\frac{(Index\cdot(1-N_3)+N_1\cdot N_2\cdot N_3)\cdot((N_3+Index\cdot(1-N_3)+N_1\cdot N_2\cdot N_3)-1)}{N_1\cdot N_2\cdot(N_3-1)} = 40.85000$$

len of frac. $\frac{N_1\cdot N_2\cdot N_3}{N_1\cdot N_2\cdot N_3-Index\cdot(N_3-1)} = 1.26316$

Total number of fractions.

$N_1\cdot N_2+1 = 9.00000$

Fraction at Index:

Num: $N_1\cdot N_2\cdot N_3-Index\cdot(N_3-1) = 38.00000$

Den: $N_1\cdot N_2 = 8.00000$

$$\frac{(N_1\cdot N_2\cdot N_3-Index\cdot(N_3-1))}{(N_1\cdot N_2)} = 4.75000$$

Fraction at Compliment:

$$\frac{N_1\cdot N_2\cdot N_3-C_{indx}\cdot(N_3-1)}{N_1\cdot N_2} = 1.62500$$

$$\frac{(N_3-C_{indx}\cdot N_3-Index\cdot N_3)+2\cdot N_1\cdot N_2\cdot N_3}{N_1\cdot N_2} = 6.00000$$

N[1] -> 0
N[1] -> 1
N[1] -> 2
N[1] -> 3
N[1] -> 4
N[1] -> 5
N[1] -> 6
N[1] -> 7
N[1] -> 8
N[1] -> 9
N[1] -> 10
N[1] -> 11

N[2] -> 0
N[2] -> 1
N[2] -> 2
N[2] -> 3
N[2] -> 4
N[2] -> 5
N[2] -> 6
N[2] -> 7
N[2] -> 8
N[2] -> 9
N[2] -> 10
N[2] -> 11

N_1 = 4.00000
N_2 = 2.00000
N_3 = 6.00000

N[3] -> 0
N[3] -> 1
N[3] -> 2
N[3] -> 3
N[3] -> 4
N[3] -> 5
N[3] -> 6
N[3] -> 7
N[3] -> 8
N[3] -> 9
N[3] -> 10
N[3] -> 11

$\frac{N_3}{1}$ = 6.00000 $\frac{N_3}{E}$ = 2.87500

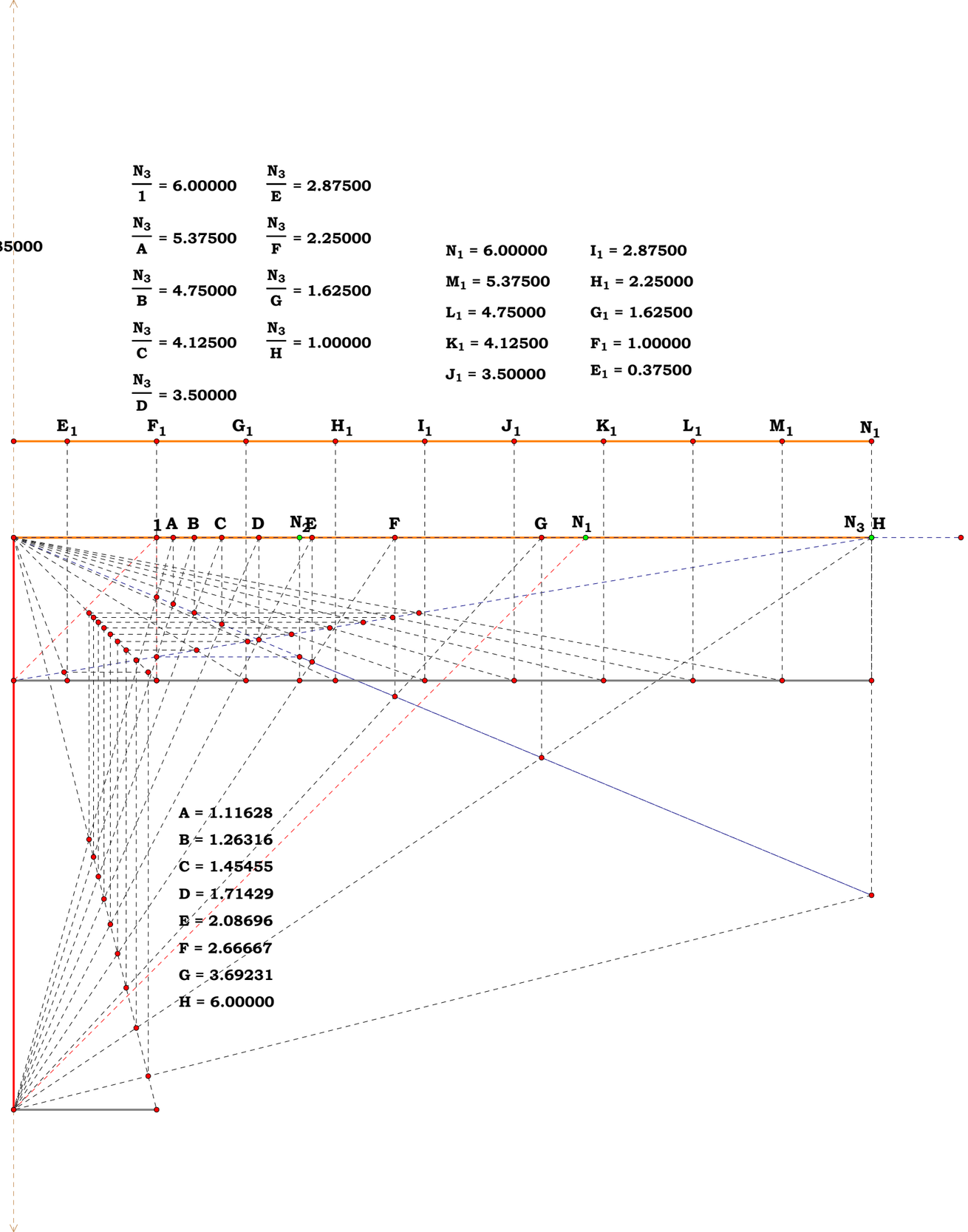
$\frac{N_3}{A}$ = 5.37500 $\frac{N_3}{F}$ = 2.25000

$\frac{N_3}{B}$ = 4.75000 $\frac{N_3}{G}$ = 1.62500

$\frac{N_3}{C}$ = 4.12500 $\frac{N_3}{H}$ = 1.00000

$\frac{N_3}{D}$ = 3.50000

N_1 = 6.00000 I_1 = 2.87500
M_1 = 5.37500 H_1 = 2.25000
L_1 = 4.75000 G_1 = 1.62500
K_1 = 4.12500 F_1 = 1.00000
J_1 = 3.50000 E_1 = 0.37500

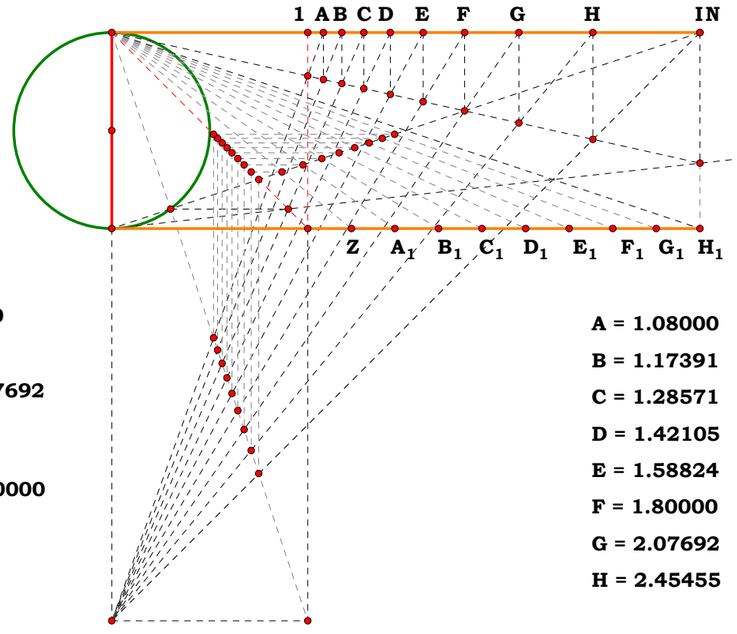


$x_{H_1} = 3.00000$

N -> 0
N -> 1
N -> 2
N -> 3
N -> 4
N -> 5
N -> 6
N -> 7
N -> 8
N -> 9
N -> 10
N -> 11

N = 3.00000

Show Objects



$In_{dx} = 7$

$\frac{N^3}{(N^3-N)+1} = 1.08000$

$\frac{N^3}{N^3-In_{dx}\cdot(N-1)} = 2.07692$

$N^3 = 27.00000$

$N^3-In_{dx}\cdot(N-1) = 13.00000$

$N^2 = 9.00000$

A = 1.08000
B = 1.17391
C = 1.28571
D = 1.42105
E = 1.58824
F = 1.80000
G = 2.07692
H = 2.45455

I = 3.00000

$H_1 = 2.77778$
$F_1 = 2.55556$
$E_1 = 2.33333$
$D_1 = 2.11111$
$C_1 = 1.88889$
$B_1 = 1.66667$
$A_1 = 1.44444$
Z = 1.22222

$\frac{N}{A} = 2.77778$
$\frac{N}{B} = 2.55556$
$\frac{N}{C} = 2.33333$
$\frac{N}{D} = 2.11111$
$\frac{N}{E} = 1.88889$
$\frac{N}{F} = 1.66667$
$\frac{N}{G} = 1.44444$
$\frac{N}{H} = 1.22222$

Fractional Geometric Series.

Plate 1.

Index is Base 0

Index: $I_{ndx} = 0$

Number of div. at an index. $N_b\text{-}\frac{I_{ndx}}{N_a} = 5.00000$

Number of div. by difference at an index.

$$\frac{(I_{ndx}\text{-}N_a\cdot N_b)\cdot((I_{ndx}\text{-}N_a\cdot N_b)+1)}{N_a} = 45.0000$$

Total number of fractions.

$N_a\cdot N_b\text{-}N_a = 8.00000$

$$\frac{\text{numerator}}{\text{denominator}} = 2.00000$$

numerator = 2.00000

denominator = 1.00000

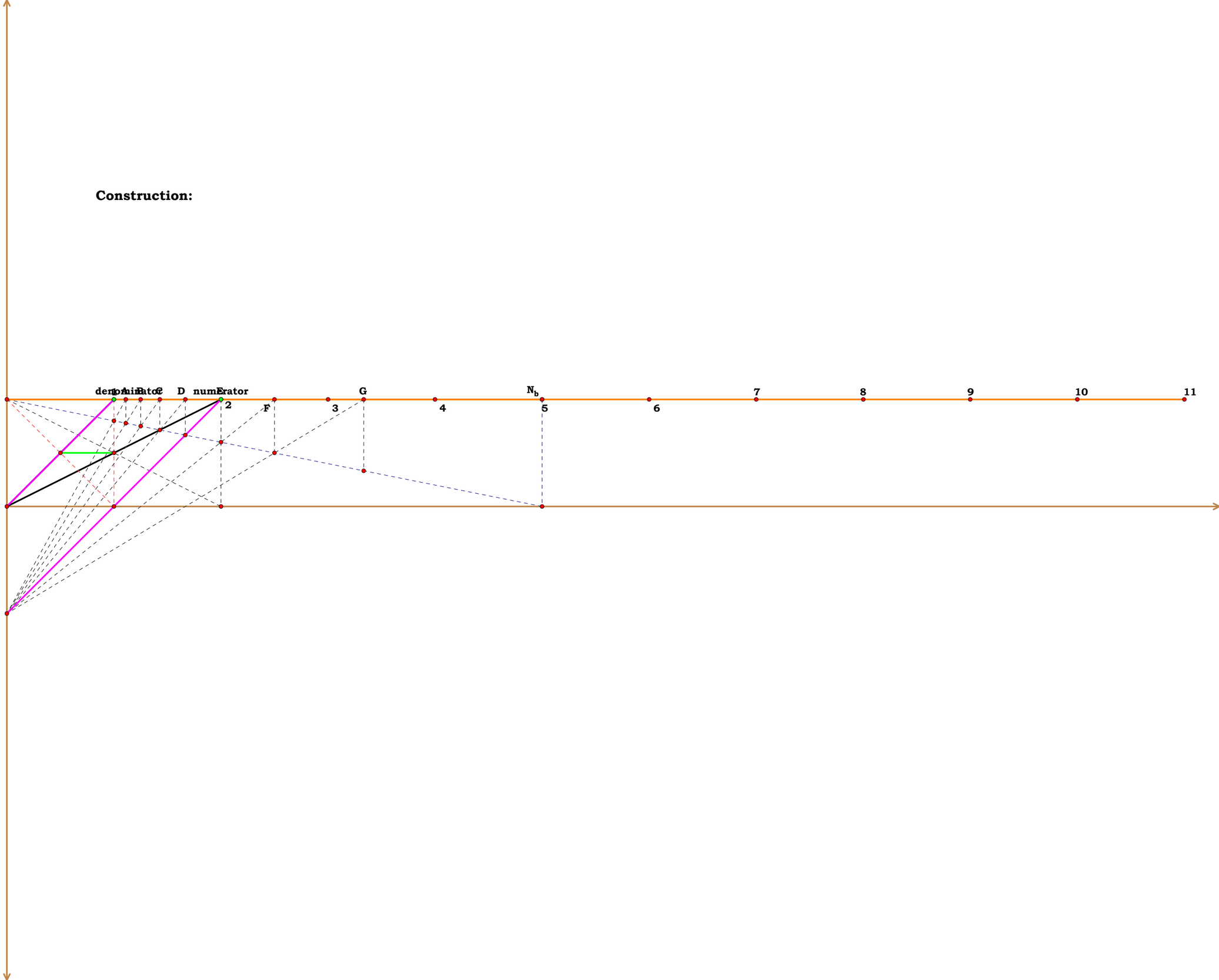
$N_a = 2.00000$

$N_b = 5.00000$

num	den	
N[1] -> 0	N[3] -> 0	N[2] -> 0
N[1] -> 1	N[3] -> 1	N[2] -> 1
N[1] -> 2	N[3] -> 2	N[2] -> 2
N[1] -> 3	N[3] -> 3	N[2] -> 3
N[1] -> 4	N[3] -> 4	N[2] -> 4
N[1] -> 5	N[3] -> 5	N[2] -> 5
N[1] -> 6	N[3] -> 6	N[2] -> 6
N[1] -> 7	N[3] -> 7	N[2] -> 7
N[1] -> 8	N[3] -> 8	N[2] -> 8
N[1] -> 9	N[3] -> 9	N[2] -> 9
N[1] -> 10	N[3] -> 10	N[2] -> 10
N[1] -> 11	N[3] -> 11	N[2] -> 11

Hide Intersection

Construction:



Index is Base 0

Index: $I_{ndx} = 1$

Number of div. at an index. $N_b - \frac{I_{ndx}}{N_a} = 10.54545$

Number of div. by difference at an index.

$$\frac{(I_{ndx} - N_a \cdot N_b) \cdot ((I_{ndx} - N_a \cdot N_b) + 1)}{N_a} = 234.1091$$

Total number of fractions.

$N_a \cdot N_b - N_a = 22.00000$

Present 2 Actions

$$\frac{\text{numerator}}{\text{denominator}} = 2.20000$$

numerator = 11.00000

denominator = 5.00000

num

- N[1] -> 0
- N[1] -> 1
- N[1] -> 2
- N[1] -> 3
- N[1] -> 4
- N[1] -> 5
- N[1] -> 6
- N[1] -> 7
- N[1] -> 8
- N[1] -> 9
- N[1] -> 10
- N[1] -> 11

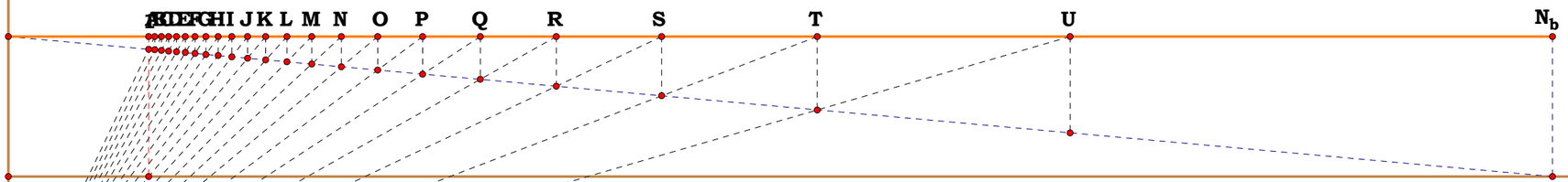
den

- N[3] -> 0
- N[3] -> 1
- N[3] -> 2
- N[3] -> 3
- N[3] -> 4
- N[3] -> 5
- N[3] -> 6
- N[3] -> 7
- N[3] -> 8
- N[3] -> 9
- N[3] -> 10
- N[3] -> 11

Show Intersection

$\frac{N_b}{1} = 11.00000$
$\frac{N_b}{A} = 10.54545$
$\frac{N_b}{B} = 10.09091$
$\frac{N_b}{C} = 9.63636$
$\frac{N_b}{D} = 9.18182$
$\frac{N_b}{E} = 8.72727$
$\frac{N_b}{F} = 8.27273$
$\frac{N_b}{G} = 7.81818$
$\frac{N_b}{H} = 7.36364$
$\frac{N_b}{I} = 6.90909$
$\frac{N_b}{J} = 6.45455$
$\frac{N_b}{K} = 6.00000$
$\frac{N_b}{L} = 5.54545$
$\frac{N_b}{M} = 5.09091$
$\frac{N_b}{N} = 4.63636$
$\frac{N_b}{O} = 4.18182$
$\frac{N_b}{P} = 3.72727$
$\frac{N_b}{Q} = 3.27273$
$\frac{N_b}{R} = 2.81818$
$\frac{N_b}{S} = 2.36364$
$\frac{N_b}{T} = 1.90909$
$\frac{N_b}{U} = 1.45455$

$\frac{116}{11} = 10.54545$
$\frac{111}{11} = 10.09091$
$\frac{106}{11} = 9.63636$
$\frac{101}{11} = 9.18182$



$N_a = 2.20000$

$N_b = 11.00000$

- N[2] -> 0
- N[2] -> 1
- N[2] -> 2
- N[2] -> 3
- N[2] -> 4
- N[2] -> 5
- N[2] -> 6
- N[2] -> 7
- N[2] -> 8
- N[2] -> 9
- N[2] -> 10
- N[2] -> 11

A = 1.04310
B = 1.09009
C = 1.14151
D = 1.19802
E = 1.26042
F = 1.32967
G = 1.40698
H = 1.49383
I = 1.59211
J = 1.70423
K = 1.83333
L = 1.98361
M = 2.16071
N = 2.37255
O = 2.63043
P = 2.95122
Q = 3.36111
R = 3.90323
S = 4.65385
T = 5.76190
U = 7.56250

Index is Base 0

$I_{ndx} = 0$

$N_b - \frac{I_{ndx}}{N_a} = 11.00000$

$\frac{(I_{ndx} - N_a \cdot N_b) \cdot ((I_{ndx} - N_a \cdot N_b) + 1)}{N_a} = 110.0000$

$N_a \cdot N_b - N_a = 10.00000$

Present 2 Actions

$\frac{N_b}{1} = 11.00000$ $\frac{N_b}{H} = 3.00000$

$\frac{N_b}{A} = 10.00000$ $\frac{N_b}{I} = 2.00000$

$\frac{N_b}{B} = 9.00000$

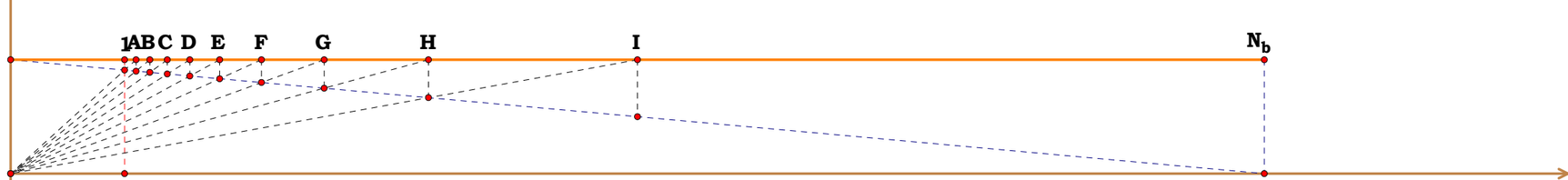
$\frac{N_b}{C} = 8.00000$

$\frac{N_b}{D} = 7.00000$

$\frac{N_b}{E} = 6.00000$

$\frac{N_b}{F} = 5.00000$

$\frac{N_b}{G} = 4.00000$



$\frac{\text{numerator}}{\text{denominator}} = 1.00000$

numerator = 1.00000

denominator = 1.00000

$N_a = 1.00000$

$N_b = 11.00000$

num	den	
N[1] -> 0	N[3] -> 0	N[2] -> 0
N[1] -> 1	N[3] -> 1	N[2] -> 1
N[1] -> 2	N[3] -> 2	N[2] -> 2
N[1] -> 3	N[3] -> 3	N[2] -> 3
N[1] -> 4	N[3] -> 4	N[2] -> 4
N[1] -> 5	N[3] -> 5	N[2] -> 5
N[1] -> 6	N[3] -> 6	N[2] -> 6
N[1] -> 7	N[3] -> 7	N[2] -> 7
N[1] -> 8	N[3] -> 8	N[2] -> 8
N[1] -> 9	N[3] -> 9	N[2] -> 9
N[1] -> 10	N[3] -> 10	N[2] -> 10
N[1] -> 11	N[3] -> 11	N[2] -> 11

Show Intersection

A = 1.10000

B = 1.22222

C = 1.37500

D = 1.57143

E = 1.83333

F = 2.20000

G = 2.75000

H = 3.66667

I = 5.50000

Index is Base 0

$I_{ndx} = 0$

$N_b - \frac{I_{ndx}}{N_a} = 7.00000$

$\frac{(I_{ndx} - N_a \cdot N_b) \cdot ((I_{ndx} - N_a \cdot N_b) + 1)}{N_a} = 42.0000$

$N_a \cdot N_b - N_a = 6.00000$

Present 2 Actions

Present 2 Actions

$\frac{\text{numerator}}{\text{denominator}} = 1.00000$

numerator = 1.00000

denominator = 1.00000

$N_a = 1.00000$

$N_b = 7.00000$

num

- N[1] -> 0
- N[1] -> 1
- N[1] -> 2
- N[1] -> 3
- N[1] -> 4
- N[1] -> 5
- N[1] -> 6
- N[1] -> 7
- N[1] -> 8
- N[1] -> 9
- N[1] -> 10
- N[1] -> 11

den

- N[3] -> 0
- N[3] -> 1
- N[3] -> 2
- N[3] -> 3
- N[3] -> 4
- N[3] -> 5
- N[3] -> 6
- N[3] -> 7
- N[3] -> 8
- N[3] -> 9
- N[3] -> 10
- N[3] -> 11

Home Point

- A Point
- B Point
- C Point
- D Point
- E Point
- F Point

- N[2] -> 0
- N[2] -> 1
- N[2] -> 2
- N[2] -> 3
- N[2] -> 4
- N[2] -> 5
- N[2] -> 6
- N[2] -> 7
- N[2] -> 8
- N[2] -> 9
- N[2] -> 10
- N[2] -> 11

Show Intersection

$\frac{N_b}{1} = 7.00000$

$\frac{N_b}{A} = 6.00000$

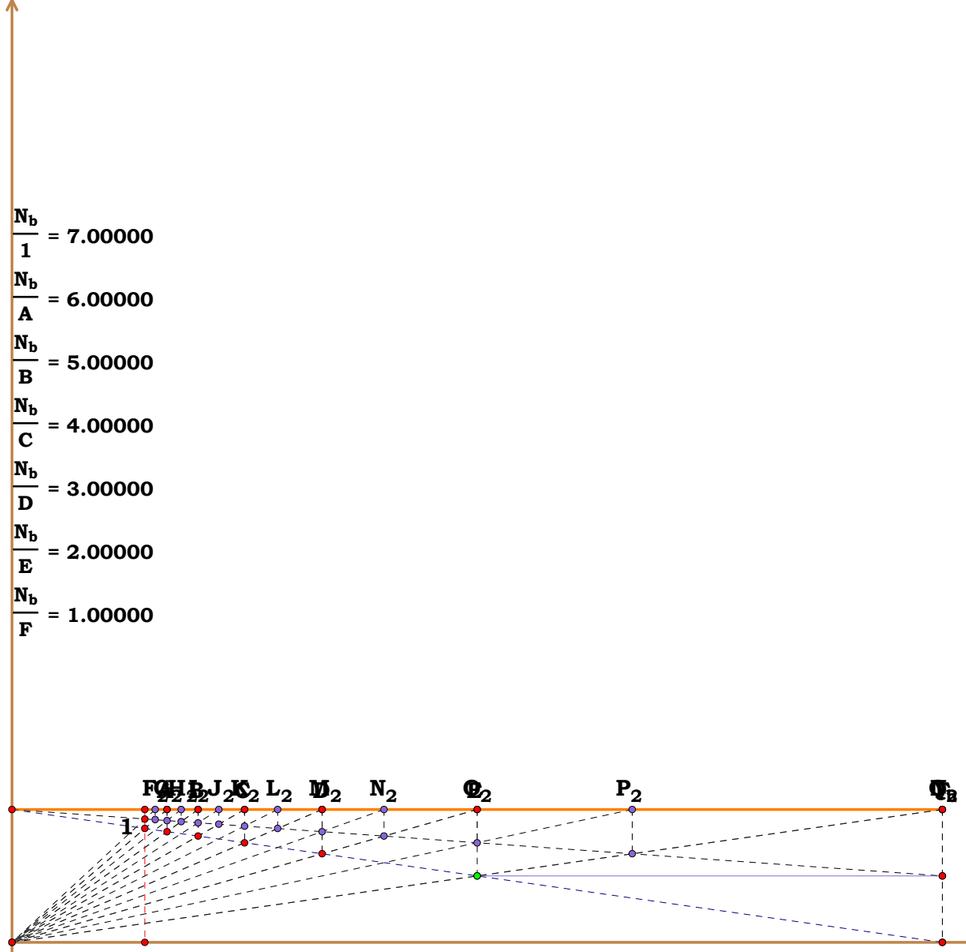
$\frac{N_b}{B} = 5.00000$

$\frac{N_b}{C} = 4.00000$

$\frac{N_b}{D} = 3.00000$

$\frac{N_b}{E} = 2.00000$

$\frac{N_b}{F} = 1.00000$



$\frac{N_b}{F_2} = 6.50000$

$\frac{N_b}{G_2} = 6.00000$

$\frac{N_b}{H_2} = 5.50000$

$\frac{N_b}{I_2} = 5.00000$

$\frac{N_b}{J_2} = 4.50000$

$\frac{N_b}{K_2} = 4.00000$

$\frac{N_b}{L_2} = 3.50000$

$\frac{N_b}{M_2} = 3.00000$

$\frac{N_b}{N_2} = 2.50000$

$\frac{N_b}{O_2} = 2.00000$

$\frac{N_b}{P_2} = 1.50000$

$\frac{N_b}{Q_2} = 1.00000$

$F_2 = 1.07692$

$G_2 = 1.16667$

$H_2 = 1.27273$

$I_2 = 1.40000$

$J_2 = 1.55556$

$K_2 = 1.75000$

$L_2 = 2.00000$

$M_2 = 2.33333$

$N_2 = 2.80000$

$O_2 = 3.50000$

$P_2 = 4.66667$

$Q_2 = 7.00000$

Recursive division using the first series points on the operational tail.

Index is Base 0

$I_{ndx} = 0$

$N_b - \frac{I_{ndx}}{N_a} = 7.00000$

$\frac{(I_{ndx} - N_a \cdot N_b) \cdot ((I_{ndx} - N_a \cdot N_b) + 1)}{N_a} = 42.0000$

$N_a \cdot N_b - N_a = 6.00000$

Present 2 Actions

Present 2 Actions

$\frac{\text{numerator}}{\text{denominator}} = 1.00000$

numerator = 1.00000

denominator = 1.00000

$N_a = 1.00000$

$N_b = 7.00000$

num

N[1] -> 0
N[1] -> 1
N[1] -> 2
N[1] -> 3
N[1] -> 4
N[1] -> 5
N[1] -> 6
N[1] -> 7
N[1] -> 8
N[1] -> 9
N[1] -> 10
N[1] -> 11

den

N[3] -> 0
N[3] -> 1
N[3] -> 2
N[3] -> 3
N[3] -> 4
N[3] -> 5
N[3] -> 6
N[3] -> 7
N[3] -> 8
N[3] -> 9
N[3] -> 10
N[3] -> 11

Home Point
A Point
B Point
C Point
D Point
E Point
F Point

N[2] -> 0
N[2] -> 1
N[2] -> 2
N[2] -> 3
N[2] -> 4
N[2] -> 5
N[2] -> 6
N[2] -> 7
N[2] -> 8
N[2] -> 9
N[2] -> 10
N[2] -> 11

Show Intersection

$\frac{N_b}{1} = 7.00000$

$\frac{N_b}{A} = 6.00000$

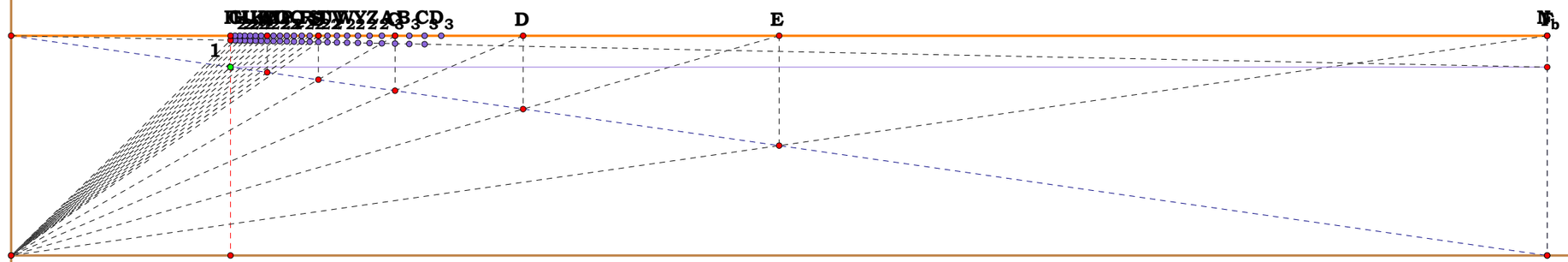
$\frac{N_b}{B} = 5.00000$

$\frac{N_b}{C} = 4.00000$

$\frac{N_b}{D} = 3.00000$

$\frac{N_b}{E} = 2.00000$

$\frac{N_b}{F} = 1.00000$



$\frac{N_b}{F_2} = 6.85714$ $\frac{N_b}{J_2} = 6.28571$ $\frac{N_b}{N_2} = 5.71429$ $\frac{N_b}{R_2} = 5.14286$ $\frac{N_b}{V_2} = 4.57143$ $\frac{N_b}{A_3} = 4.00000$

$\frac{N_b}{G_2} = 6.71429$ $\frac{N_b}{K_2} = 6.14286$ $\frac{N_b}{O_2} = 5.57143$ $\frac{N_b}{S_2} = 5.00000$ $\frac{N_b}{W_2} = 4.42857$ $\frac{N_b}{B_3} = 3.85714$

$\frac{N_b}{H_2} = 6.57143$ $\frac{N_b}{L_2} = 6.00000$ $\frac{N_b}{P_2} = 5.42857$ $\frac{N_b}{T_2} = 4.85714$ $\frac{N_b}{Y_2} = 4.28571$ $\frac{N_b}{C_3} = 3.71429$

$\frac{N_b}{I_2} = 6.42857$ $\frac{N_b}{M_2} = 5.85714$ $\frac{N_b}{Q_2} = 5.28571$ $\frac{N_b}{U_2} = 4.71429$ $\frac{N_b}{Z_2} = 4.14286$ $\frac{N_b}{D_3} = 3.57143$

$F_2 = 1.02083$ $O_2 = 1.25641$ $Y_2 = 1.63333$

$G_2 = 1.04255$ $P_2 = 1.28947$ $Z_2 = 1.68966$

$H_2 = 1.06522$ $Q_2 = 1.32432$ $A_3 = 1.75000$

$I_2 = 1.08889$ $R_2 = 1.36111$ $B_3 = 1.81481$

$J_2 = 1.11364$ $S_2 = 1.40000$ $C_3 = 1.88462$

$K_2 = 1.13953$ $T_2 = 1.44118$ $D_3 = 1.96000$

$L_2 = 1.16667$ $U_2 = 1.48485$

$M_2 = 1.19512$ $V_2 = 1.53125$

$N_2 = 1.22500$ $W_2 = 1.58065$

Recursive division using the first series points on the operational tail.

Fractional Geometric Series.

Plate 2.

Construction:

Index = 1

Frac. mult. $\frac{(1-N_2)\cdot Index+N_1\cdot N_2\cdot N_3}{N_1\cdot N_3} = 6.74335$

# of fracs. $N_1\cdot N_3 = 8.00000$

len of frac. $\frac{N_1\cdot N_2\cdot N_3}{N_1\cdot N_2\cdot N_3-Index\cdot(N_2-1)} = 1.12167$

num of div. for frac. $\frac{(Index\cdot(1-N_2)+N_1\cdot N_2\cdot N_3)\cdot((N_2+Index\cdot(1-N_2)+N_1\cdot N_2\cdot N_3)-1)}{N_1\cdot N_3\cdot(N_2-1)} = 62.16558$

$N_1 = 4.00000$

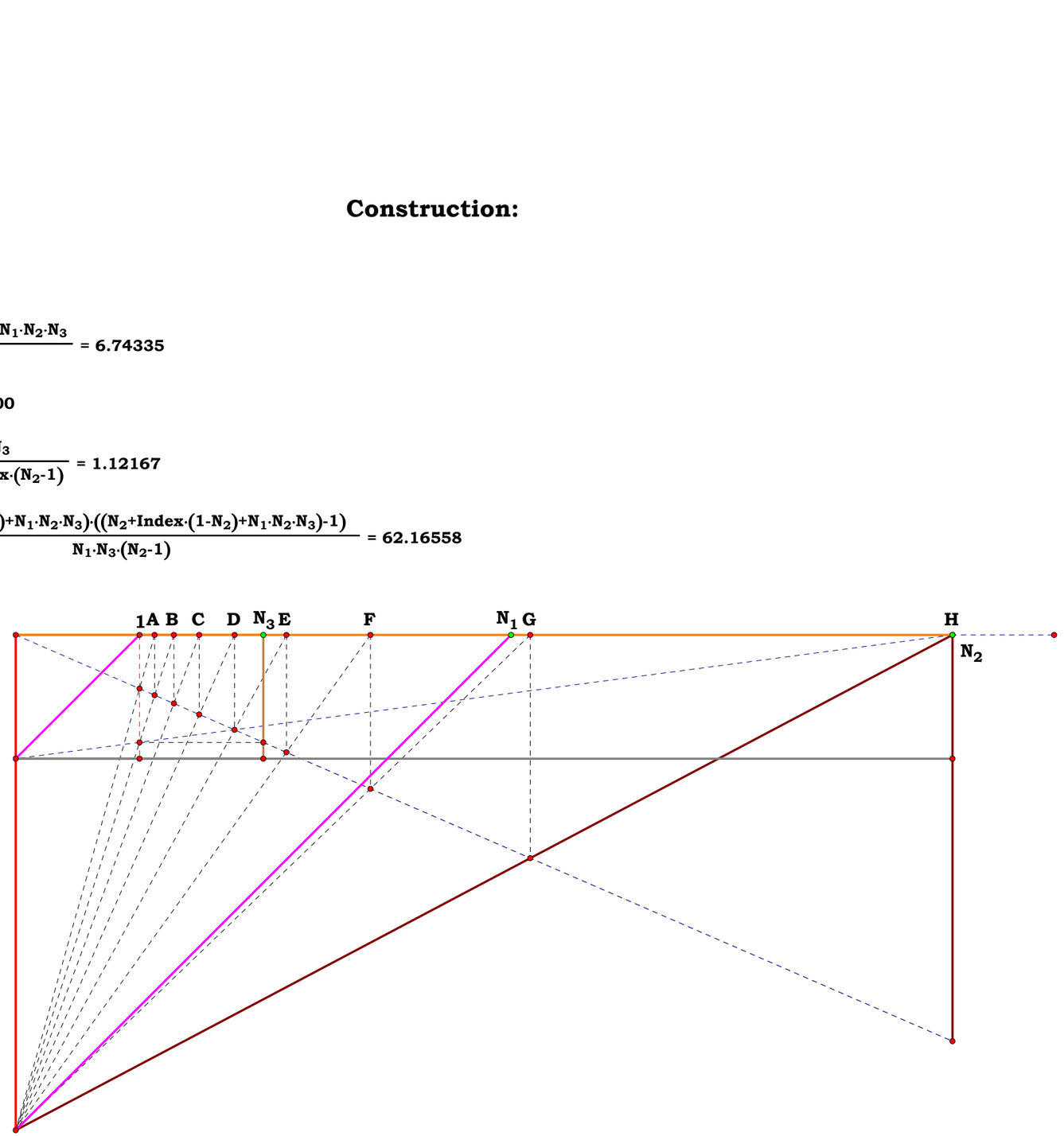
$N_3 = 2.00000$

$N_2 = 7.56383$

N[1] -> 0
N[1] -> 1
N[1] -> 2
N[1] -> 3
N[1] -> 4
N[1] -> 5
N[1] -> 6
N[1] -> 7
N[1] -> 8
N[1] -> 9
N[1] -> 10
N[1] -> 11

N[3] -> 0
N[3] -> 1
N[3] -> 2
N[3] -> 3
N[3] -> 4
N[3] -> 5
N[3] -> 6
N[3] -> 7
N[3] -> 8
N[3] -> 9
N[3] -> 10
N[3] -> 11

N[2] -> 0
N[2] -> 1
N[2] -> 2
N[2] -> 3
N[2] -> 4
N[2] -> 5
N[2] -> 6
N[2] -> 7
N[2] -> 8
N[2] -> 9
N[2] -> 10
N[2] -> 11



Index = 1

Frac. mult. $\frac{(1-N_2)\cdot Index+N_1\cdot N_2\cdot N_3}{N_1\cdot N_3} = 6.38408$

# of fracs. $N_1\cdot N_3 = 15.00000$

len of frac. $\frac{N_1\cdot N_2\cdot N_3}{N_1\cdot N_2\cdot N_3-Index\cdot(N_2-1)} = 1.06024$

num of div. for frac. $\frac{(Index\cdot(1-N_2)+N_1\cdot N_2\cdot N_3)\cdot((N_2+Index\cdot(1-N_2)+N_1\cdot N_2\cdot N_3)-1)}{N_1\cdot N_3\cdot(N_2-1)} = 112.36144$

$\frac{N_2}{A-1} = 112.36144$

$\frac{N_2}{1} = 6.76866$ $\frac{N_2}{E} = 4.84577$ $\frac{N_2}{J} = 2.92289$ $\frac{N_2}{O} = 1.00000$

$\frac{N_2}{A} = 6.38408$ $\frac{N_2}{F} = 4.46119$ $\frac{N_2}{K} = 2.53831$

$\frac{N_2}{B} = 5.99950$ $\frac{N_2}{G} = 4.07662$ $\frac{N_2}{L} = 2.15373$

$\frac{N_2}{C} = 5.61492$ $\frac{N_2}{H} = 3.69204$ $\frac{N_2}{M} = 1.76915$

$\frac{N_2}{D} = 5.23035$ $\frac{N_2}{I} = 3.30746$ $\frac{N_2}{N} = 1.38458$

$N_1 = 3.00000$

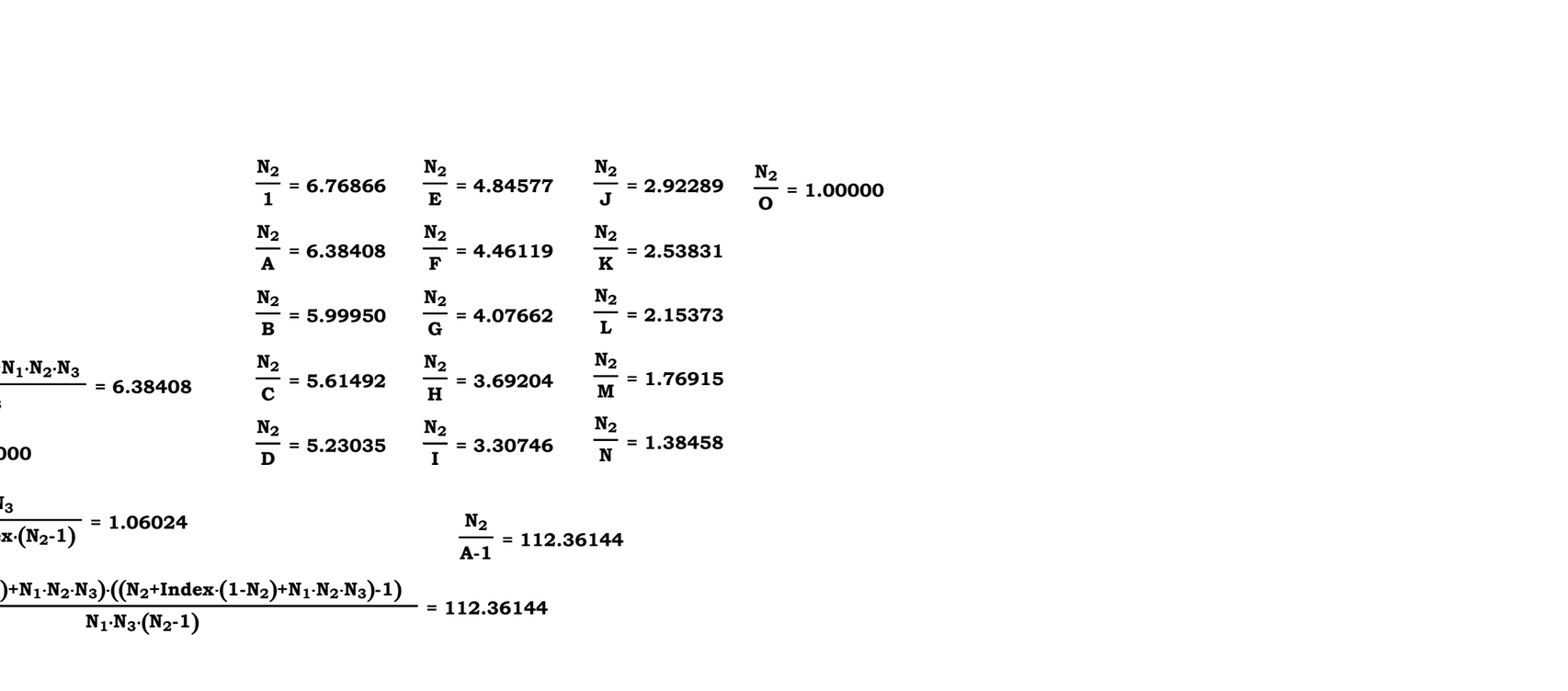
$N_3 = 5.00000$

$N_2 = 6.76866$

N[1] -> 0 N[1] -> 1 N[1] -> 2 N[1] -> 3 N[1] -> 4 N[1] -> 5 N[1] -> 6 N[1] -> 7 N[1] -> 8 N[1] -> 9 N[1] -> 10 N[1] -> 11

N[3] -> 0 N[3] -> 1 N[3] -> 2 N[3] -> 3 N[3] -> 4 N[3] -> 5 N[3] -> 6 N[3] -> 7 N[3] -> 8 N[3] -> 9 N[3] -> 10 N[3] -> 11

N[2] -> 0 N[2] -> 1 N[2] -> 2 N[2] -> 3 N[2] -> 4 N[2] -> 5 N[2] -> 6 N[2] -> 7 N[2] -> 8 N[2] -> 9 N[2] -> 10 N[2] -> 11



A = 1.06024
B = 1.12820
C = 1.20548
D = 1.29411
E = 1.39682
F = 1.51723
G = 1.66036
H = 1.83331
I = 2.04648
J = 2.31574
K = 2.66660
L = 3.14276
M = 3.82593
N = 4.88861
O = 6.76866

Fractional Geometric Series.

Plate 3.

Hide Objects
Hide Objects
Show Intersections
Show Intersections

$$\frac{(i_{dx}\cdot(N_2-N_0\cdot N_2)+N_0\cdot N_1\cdot N_3)\cdot(((N_2-i_{dx}\cdot N_2-N_0\cdot N_2)+i_{dx}\cdot N_0\cdot N_2)-N_0\cdot N_1\cdot N_3)}{N_1\cdot N_3\cdot(((N_2+i_{dx}\cdot(N_2-N_0\cdot N_2))-i_{dx}\cdot N_2-N_0\cdot N_2)+i_{dx}\cdot N_0\cdot N_2)} = 45.55556$$

$$\frac{N_0\cdot N_1\cdot N_3}{i_{dx}\cdot(N_2-N_2\cdot N_0)+N_0\cdot N_1\cdot N_3} = 1.21951$$

$i_{dx} = 1$

$$\frac{i_{dx}\cdot(N_2-N_0\cdot N_2)+N_0\cdot N_1\cdot N_3}{N_1\cdot N_3} = 8.20000$$

$$\frac{N_1\cdot N_3-i_{dx}\cdot N_2\cdot(1-N_0)}{N_1\cdot N_3} = 2.80000$$

$N_0 = 10.00000$
$N_1 = 5.00000$
$N_2 = 1.00000$
$N_3 = 1.00000$

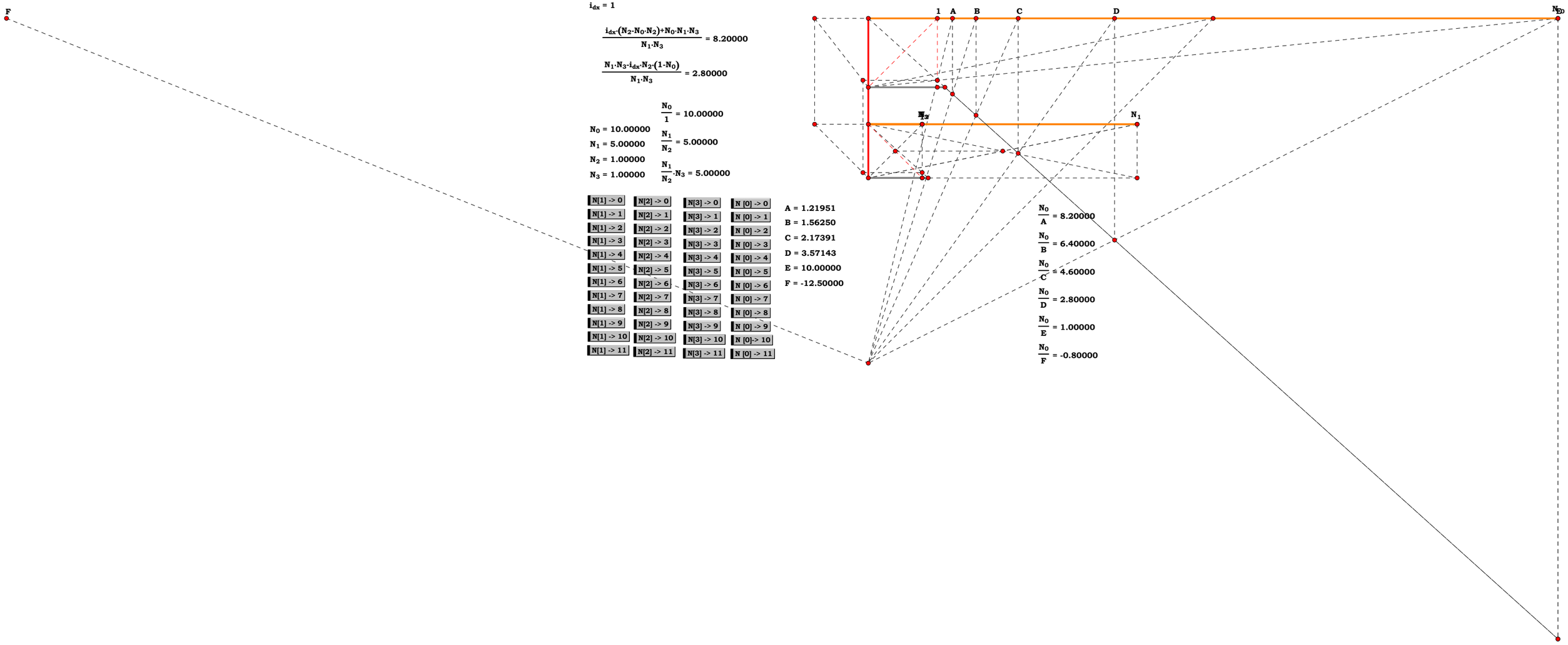
$\frac{N_0}{1} = 10.00000$

$\frac{N_1}{N_2} = 5.00000$

$\frac{N_1}{N_2}\cdot N_3 = 5.00000$

N[1] -> 0 | N[2] -> 0 | N[3] -> 0 | N [0] -> 0
N[1] -> 1 | N[2] -> 1 | N[3] -> 1 | N [0] -> 1
N[1] -> 2 | N[2] -> 2 | N[3] -> 2 | N [0] -> 2
N[1] -> 3 | N[2] -> 3 | N[3] -> 3 | N [0] -> 3
N[1] -> 4 | N[2] -> 4 | N[3] -> 4 | N [0] -> 4
N[1] -> 5 | N[2] -> 5 | N[3] -> 5 | N [0] -> 5
N[1] -> 6 | N[2] -> 6 | N[3] -> 6 | N [0] -> 6
N[1] -> 7 | N[2] -> 7 | N[3] -> 7 | N [0] -> 7
N[1] -> 8 | N[2] -> 8 | N[3] -> 8 | N [0] -> 8
N[1] -> 9 | N[2] -> 9 | N[3] -> 9 | N [0] -> 9
N[1] -> 10 | N[2] -> 10 | N[3] -> 10 | N [0]-> 10
N[1] -> 11 | N[2] -> 11 | N[3] -> 11 | N [0] -> 11

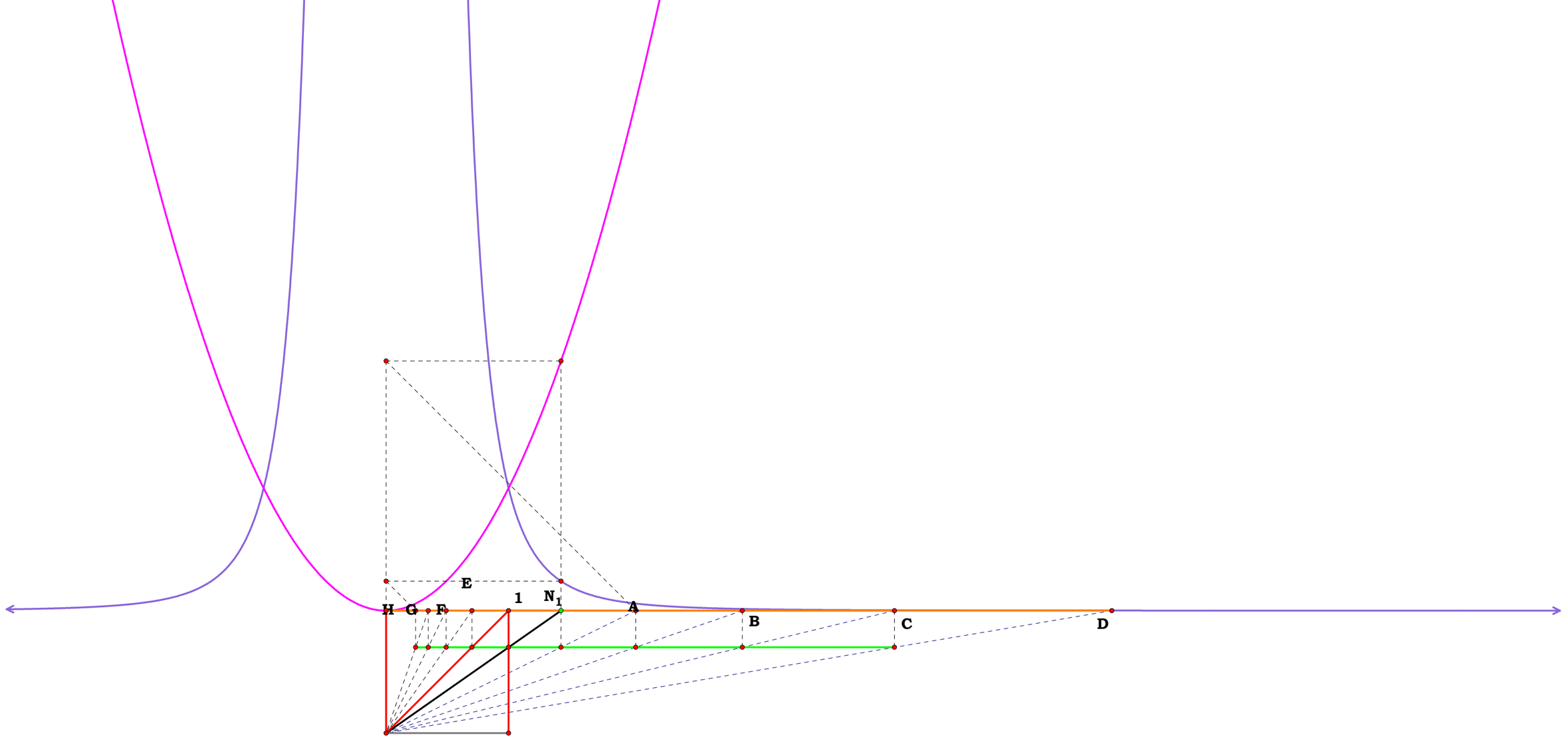
A = 1.21951
B = 1.56250
C = 2.17391
D = 3.57143
E = 10.00000
F = -12.50000



$\frac{N_0}{A} = 8.20000$
$\frac{N_0}{B} = 6.40000$
$\frac{N_0}{C} = 4.60000$
$\frac{N_0}{D} = 2.80000$
$\frac{N_0}{E} = 1.00000$
$\frac{N_0}{F} = -0.80000$

Exponential Series Notebook 1

Zero from bottom.



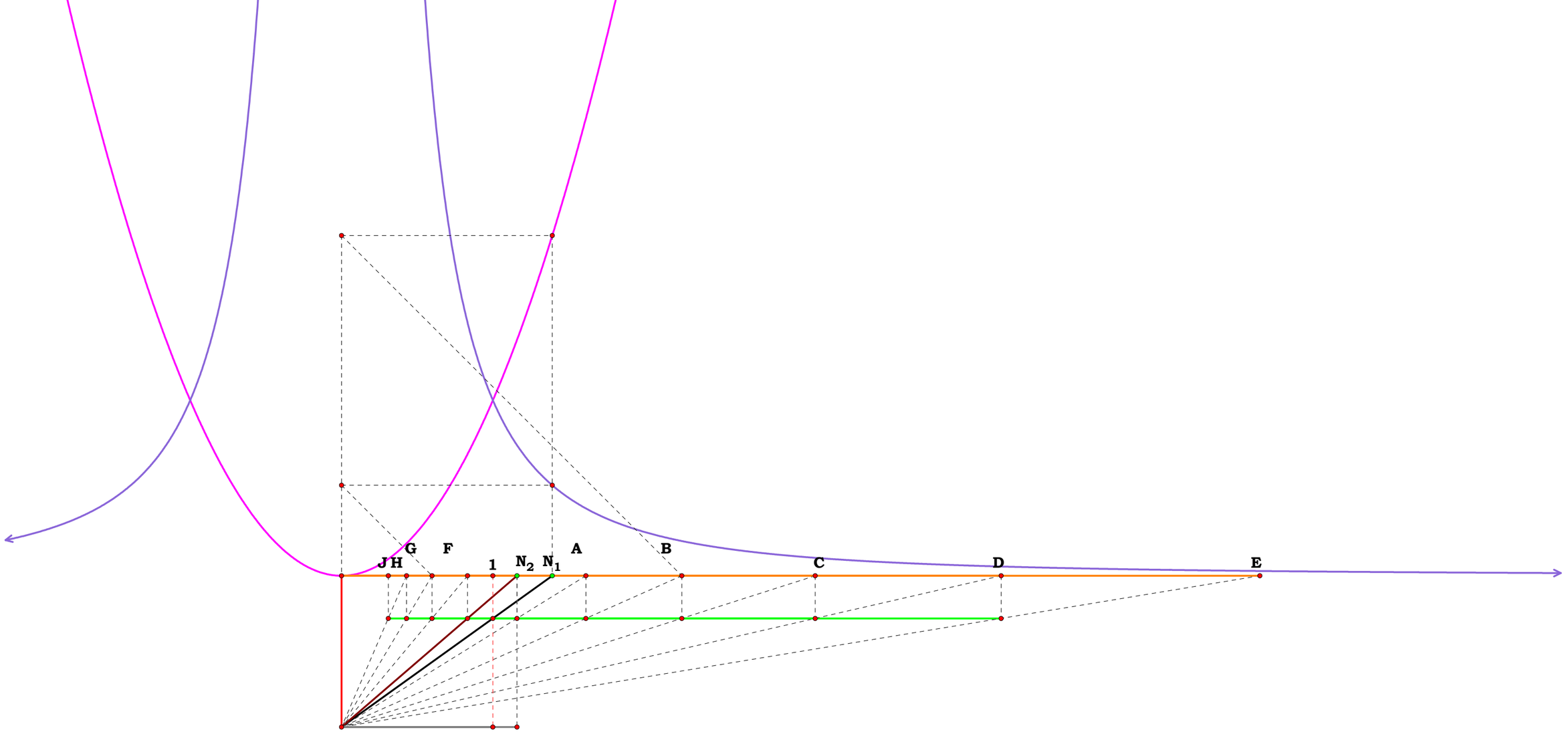
N_1 = 1.42736

A = 2.03735
B = 2.90803
C = 4.15079
D = 5.92467
E = 0.70060
F = 0.49083
G = 0.34388
H = 0.24092

N_1^2-A = 0.00000
N_1^3-B = 0.00000
N_1^4-C = 0.00000
N_1^5-D = 0.00000

N_1^{-1}-E = 0.00000
N_1^{-2}-F = 0.00000
N_1^{-3}-G = 0.00000
N_1^{-4}-H = 0.00000

Plate 1



N_1 = 1.39234

N_2 = 1.15968

A = 1.61466

B = 2.24815

C = 3.13018

D = 4.35827

E = 6.06818

F = 0.83290

G = 0.59820

H = 0.42964

J = 0.30857

$N_2 \cdot N_1^{1} - A = 0.00000$

$N_2 \cdot N_1^{2} - B = 0.00000$

$N_2 \cdot N_1^{3} - C = 0.00000$

$N_2 \cdot N_1^{4} - D = 0.00000$

$N_2 \cdot N_1^{5} - E = 0.00000$

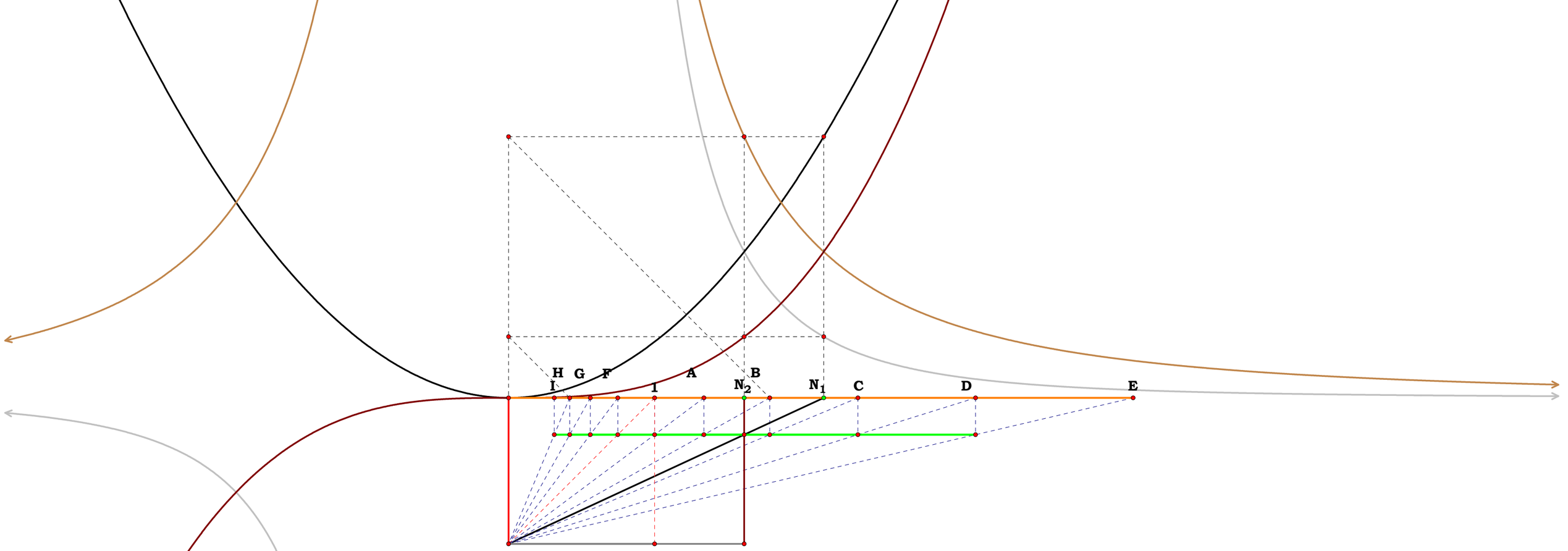
$N_2 \cdot N_1^{-1} - F = 0.00000$

$N_2 \cdot N_1^{-2} - G = 0.00000$

$N_2 \cdot N_1^{-3} - H = 0.00000$

$N_2 \cdot N_1^{-4} - J = 0.00000$

Plate 2



$N_1 = 2.15726$

$N_2 = 1.61326$

$\frac{N_1}{N_2} = 1.33720$

$A = 1.33720$

$B = 1.78811$

$C = 2.39107$

$D = 3.19734$

$E = 4.27549$

$F = 0.74783$

$G = 0.55925$

$H = 0.41822$

$I = 0.31276$

$\frac{N_1^{\,1}}{N_2}$ -A = 0.00000

$\frac{N_1^{\,2}}{N_2}$ -B = 0.00000

$\frac{N_1^{\,3}}{N_2}$ -C = 0.00000

$\frac{N_1^{\,4}}{N_2}$ -D = 0.00000

$\frac{N_1^{\,5}}{N_2}$ -E = 0.00000

$\frac{N_1^{\,-1}}{N_2}$ -F = 0.00000

$\frac{N_1^{\,-2}}{N_2}$ -G = 0.00000

$\frac{N_1^{\,-3}}{N_2}$ -H = 0.00000

$\frac{N_1^{\,-4}}{N_2}$ -I = 0.00000

Plate 3

$\frac{N_1}{N_2}$-A = 0.00000

$\frac{N_1^{\,2}}{N_2^{\,2}}$-B = 0.00000

$\frac{N_1^{\,3}}{N_2^{\,3}}$-C = 0.00000

$\frac{N_1^{\,4}}{N_2^{\,4}}$-D = 0.00000

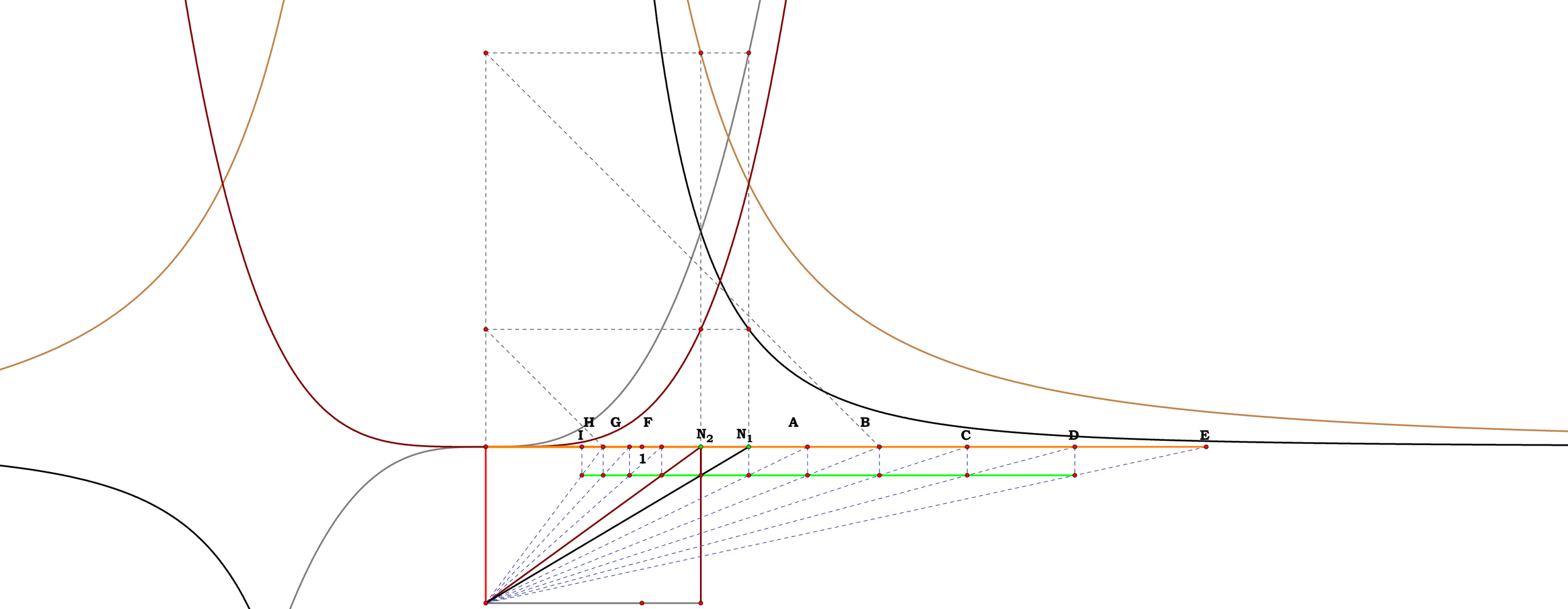
$\frac{N_1^{\,5}}{N_2^{\,5}}$-E = 0.00000

$\frac{N_2^{\,4}}{N_1^{\,4}}$-I = 0.00000

$\frac{N_2^{\,3}}{N_1^{\,3}}$-H = 0.00000

$\frac{N_2^{\,2}}{N_1^{\,2}}$-G = 0.00000

$\frac{N_2}{N_1}$-F = 0.00000



$N_1 = 1.68394$

$N_2 = 1.37660$

$\frac{N_1}{N_2} = 1.22326$

A = 2.05989

B = 2.51977

C = 3.08233

D = 3.77048

E = 4.61226

F = 1.12536

G = 0.91997

H = 0.75207

I = 0.61481

$N_1 \cdot \frac{N_1^{\,1}}{N_2} - A = 0.00000$

$N_1 \cdot \frac{N_1^{\,2}}{N_2} - B = 0.00000$

$N_1 \cdot \frac{N_1^{\,3}}{N_2} - C = 0.00000$

$N_1 \cdot \frac{N_1^{\,4}}{N_2} - D = 0.00000$

$N_1 \cdot \frac{N_1^{\,5}}{N_2} - E = 0.00000$

$N_1 \cdot \frac{N_1^{\,-1}}{N_2} - N_2 = 0.00000$

$N_1 \cdot \frac{N_1^{\,-2}}{N_2} - F = 0.00000$

$N_1 \cdot \frac{N_1^{\,-3}}{N_2} - G = 0.00000$

$N_1 \cdot \frac{N_1^{\,-4}}{N_2} - H = 0.00000$

$N_1 \cdot \frac{N_1^{\,-5}}{N_2} - I = 0.00000$

$\frac{N_1^{\,2}}{N_2} - A = 0.00000$

$\frac{N_1^{\,3}}{N_2^{\,2}} - B = 0.00000$

$\frac{N_1^{\,4}}{N_2^{\,3}} - C = 0.00000$

$\frac{N_1^{\,5}}{N_2^{\,4}} - D = 0.00000$

$\frac{N_1^{\,6}}{N_2^{\,5}} - E = 0.00000$

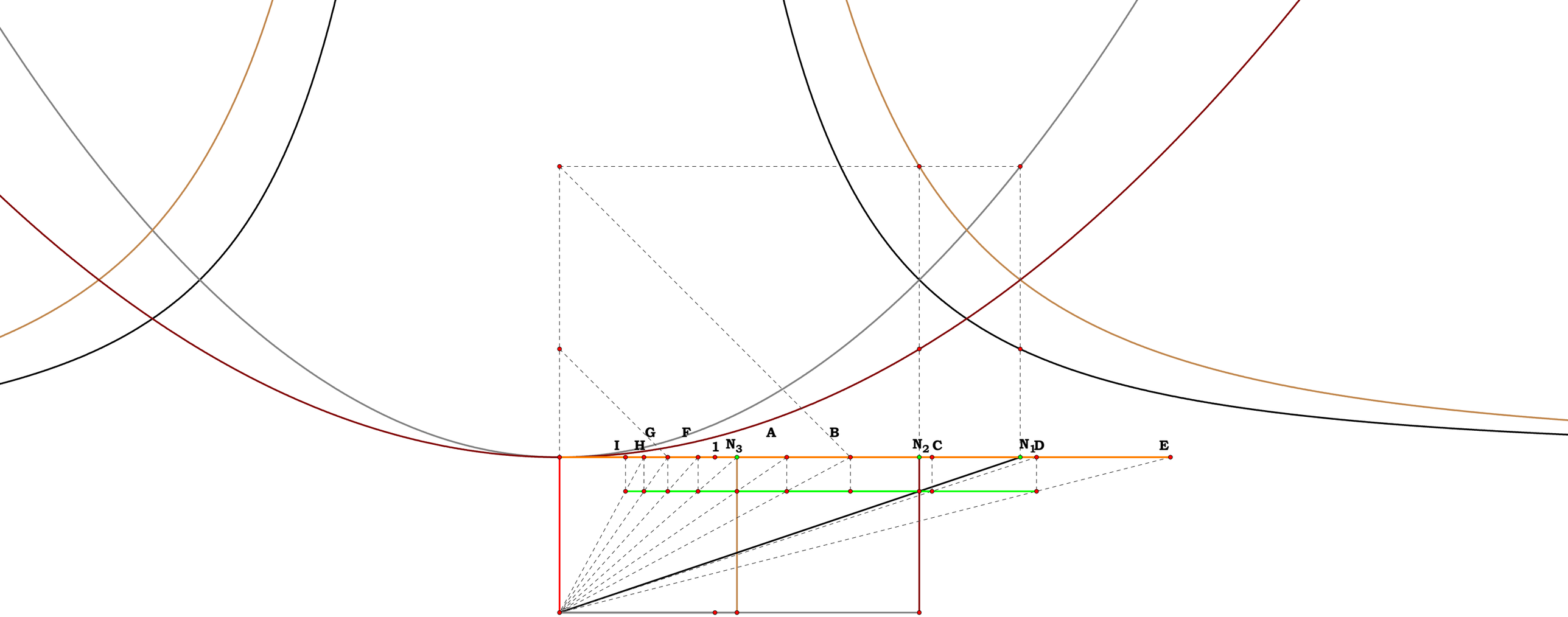
$\frac{N_2^{\,5}}{N_1^{\,4}} - I = 0.00000$

$\frac{N_2^{\,4}}{N_1^{\,3}} - H = 0.00000$

$\frac{N_2^{\,3}}{N_1^{\,2}} - G = 0.00000$

$\frac{N_2^{\,2}}{N_1} - F = 0.00000$

Plate 4



$N_1 = 2.96382$

$N_2 = 2.31441$

$N_3 = 1.14115$

$\frac{N_1}{N_2} = 1.28059$

A = 1.46135

B = 1.87140

C = 2.39649

D = 3.06893

E = 3.93005

F = 0.89111

G = 0.69586

H = 0.54339

I = 0.42433

$N_3 \cdot \frac{N_1^{\,1}}{N_2}$ -A = 0.00000

$N_3 \cdot \frac{N_1^{\,2}}{N_2}$ -B = 0.00000

$N_3 \cdot \frac{N_1^{\,3}}{N_2}$ -C = 0.00000

$N_3 \cdot \frac{N_1^{\,4}}{N_2}$ -D = 0.00000

$N_3 \cdot \frac{N_1^{\,5}}{N_2}$ -E = 0.00000

$N_3 \cdot \frac{N_1^{\,-1}}{N_2}$ -F = 0.00000

$N_3 \cdot \frac{N_1^{\,-2}}{N_2}$ -G = 0.00000

$N_3 \cdot \frac{N_1^{\,-3}}{N_2}$ -H = 0.00000

$N_3 \cdot \frac{N_1^{\,-4}}{N_2}$ -I = 0.00000

Plate 5

$\frac{N_1 \cdot N_3}{N_2}$ -A = 0.00000

$\frac{N_1^{\,2} \cdot N_3}{N_2^{\,2}}$ -B = 0.00000

$\frac{N_1^{\,3} \cdot N_3}{N_2^{\,3}}$ -C = 0.00000

$\frac{N_1^{\,4} \cdot N_3}{N_2^{\,4}}$ -D = 0.00000

$\frac{N_1^{\,5} \cdot N_3}{N_2^{\,5}}$ -E = 0.00000

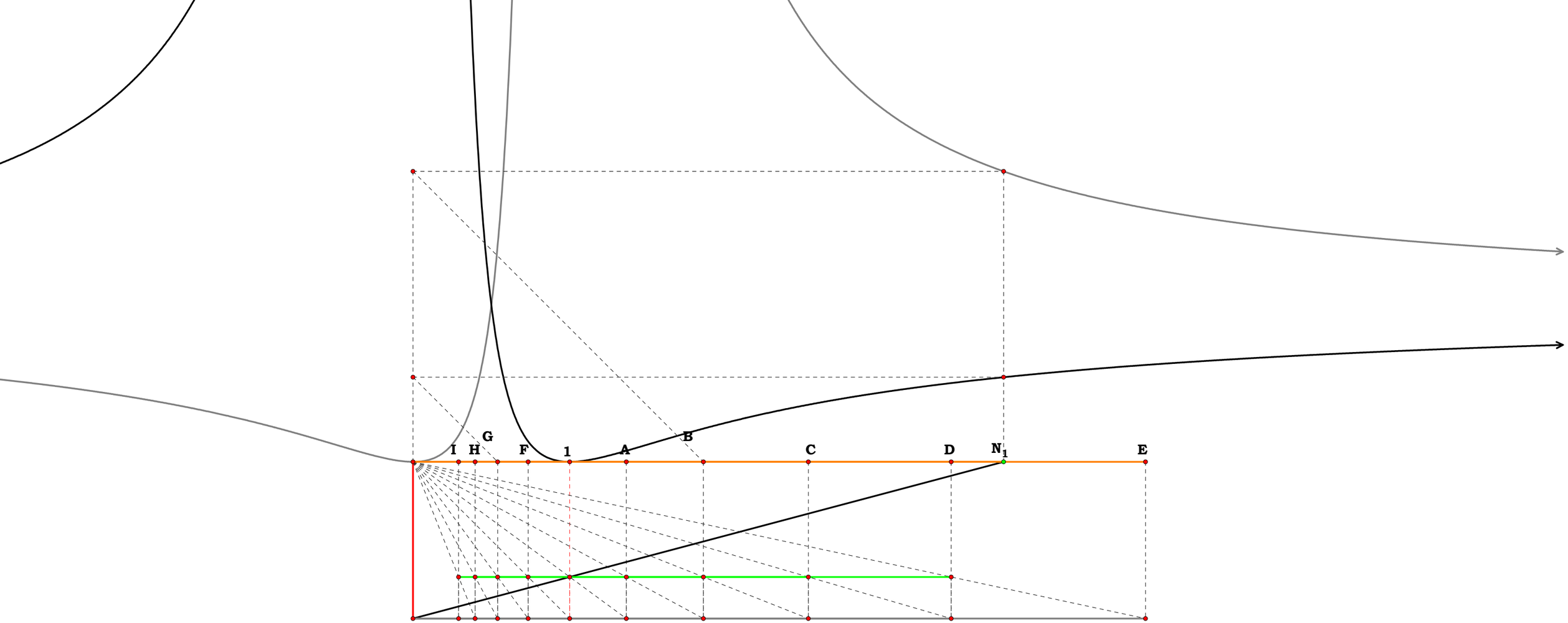
$\frac{N_2^{\,4} \cdot N_3}{N_1^{\,4}}$ -I = 0.00000

$\frac{N_2^{\,3} \cdot N_3}{N_1^{\,3}}$ -H = 0.00000

$\frac{N_2^{\,2} \cdot N_3}{N_1^{\,2}}$ -G = 0.00000

$\frac{N_2 \cdot N_3}{N_1}$ -F = 0.00000

Zero from top.



$N_1 = 3.76827$

$\frac{N_1}{N_1-1} = 1.36124$

A = 1.36124
B = 1.85297
C = 2.52232
D = 3.43348
E = 4.67378
F = 0.73463
G = 0.53968
H = 0.39646
I = 0.29125

$\frac{N_1^{\,1}}{N_1-1}$ -A = 0.00000

$\frac{N_1^{\,2}}{N_1-1}$ -B = 0.00000

$\frac{N_1^{\,3}}{N_1-1}$ -C = 0.00000

$\frac{N_1^{\,4}}{N_1-1}$ -D = 0.00000

$\frac{N_1^{\,5}}{N_1-1}$ -E = 0.00000

$\frac{N_1^{\,-1}}{N_1-1}$ -F = 0.00000

$\frac{N_1^{\,-2}}{N_1-1}$ -G = 0.00000

$\frac{N_1^{\,-3}}{N_1-1}$ -H = 0.00000

$\frac{N_1^{\,-4}}{N_1-1}$ -I = 0.00000

Plate 6

$\frac{N_1}{N_1-1}$-A = 0.00000

$\frac{N_1^2}{(N_1^2-2\cdot N_1)+1}$-B = 0.00000

$\frac{N_1^3}{((N_1^3-3\cdot N_1^2)+3\cdot N_1)-1}$-C = 0.00000

$\frac{N_1^4}{(((N_1^4-4\cdot N_1^3)+6\cdot N_1^2)-4\cdot N_1)+1}$-D = 0.00000

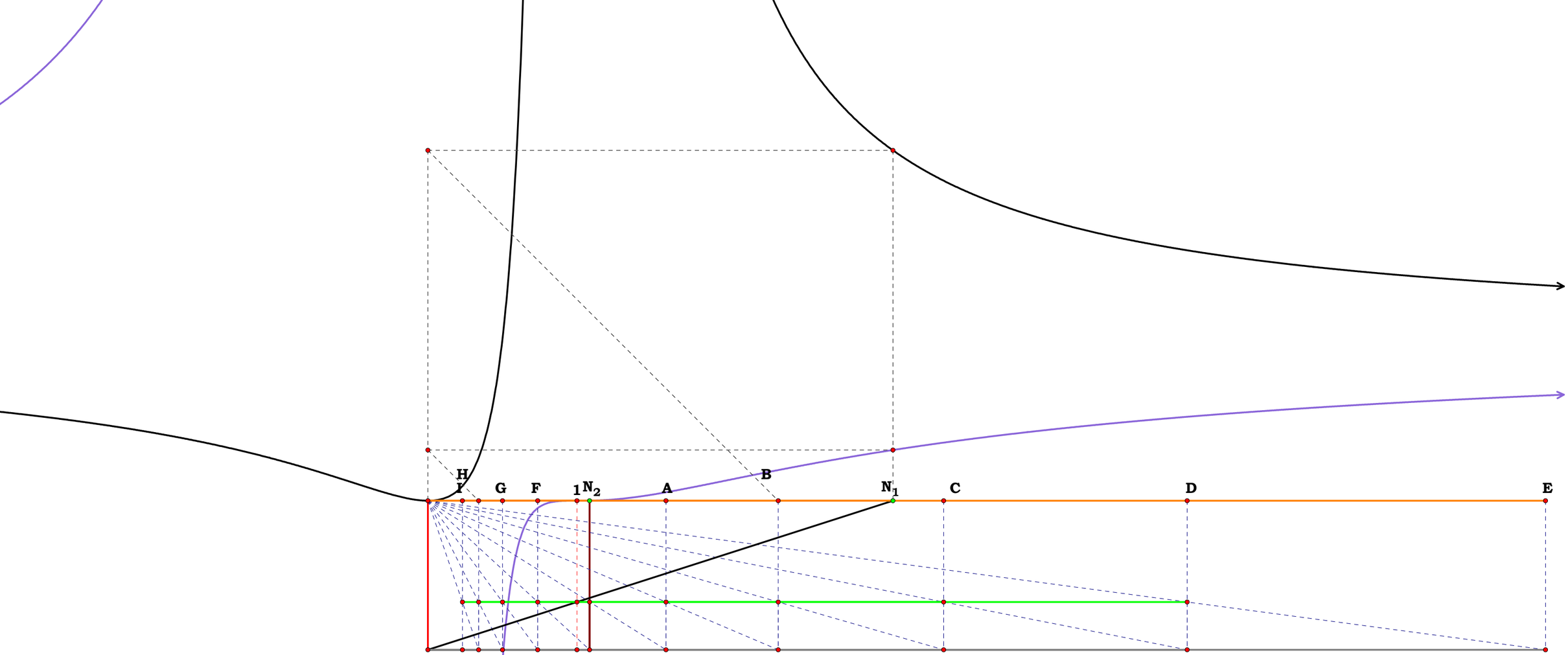
$\frac{N_1^5}{((((N_1^5-5\cdot N_1^4)+10\cdot N_1^3)-10\cdot N_1^2)+5\cdot N_1)-1}$-E = 0.00000

$\frac{(((N_1^4-4\cdot N_1^3)+6\cdot N_1^2)-4\cdot N_1)+1}{N_1^4}$-I = 0.00000

$\frac{((N_1^3-3\cdot N_1^2)+3\cdot N_1)-1}{N_1^3}$-H = 0.00000

$\frac{(N_1^2-2\cdot N_1)+1}{N_1^2}$-G = 0.00000

$\frac{N_1-1}{N_1}$-F = 0.00000



$N_1 = 3.11876$

$N_2 = 1.08464$

$\frac{N_1}{N_1-1} = 1.47197$

A = 1.59656

B = 2.35009

C = 3.45928

D = 5.09196

E = 7.49523

F = 0.73686

G = 0.50059

H = 0.34008

I = 0.23104

$N_2 \cdot \frac{N_1}{N_1-1}^{1} - A = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{2} - B = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{3} - C = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{4} - D = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{5} - E = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{-1} - F = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{-2} - G = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{-3} - H = 0.00000$

$N_2 \cdot \frac{N_1}{N_1-1}^{-4} - I = 0.00000$

$\frac{N_1 \cdot N_2}{N_1-1} - A = 0.00000$

$\frac{N_1^2 \cdot N_2}{(N_1^2-2 \cdot N_1)+1} - B = 0.00000$

$\frac{N_1^3 \cdot N_2}{((N_1^3-3 \cdot N_1^2)+3 \cdot N_1)-1} - C = 0.00000$

$\frac{N_1^4 \cdot N_2}{(((N_1^4-4 \cdot N_1^3)+6 \cdot N_1^2)-4 \cdot N_1)+1} - D = 0.00000$

$\frac{N_1^5 \cdot N_2}{((((N_1^5-5 \cdot N_1^4)+10 \cdot N_1^3)-10 \cdot N_1^2)+5 \cdot N_1)-1} - E = 0.00000$

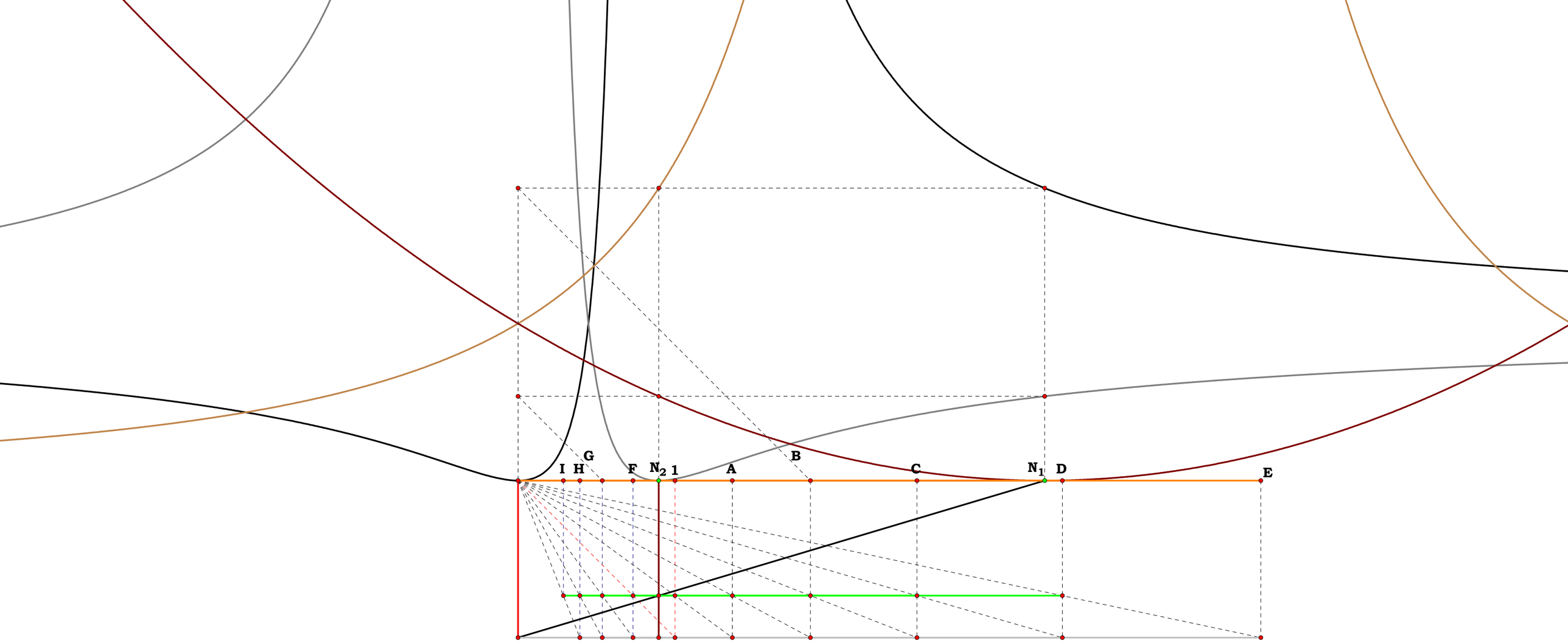
$\frac{(((N_1^4 \cdot N_2-4 \cdot N_1^3 \cdot N_2)+6 \cdot N_1^2 \cdot N_2)-4 \cdot N_1 \cdot N_2)+N_2}{N_1^4} - I = 0.00000$

$\frac{((N_1^3 \cdot N_2-3 \cdot N_1^2 \cdot N_2)+3 \cdot N_1 \cdot N_2)-N_2}{N_1^3} - H = 0.00000$

$\frac{(N_1^2 \cdot N_2-2 \cdot N_1 \cdot N_2)+N_2}{N_1^2} - G = 0.00000$

$\frac{N_1 \cdot N_2-N_2}{N_1} - F = 0.00000$

Plate 7



$N_1 = 3.35471$

$N_2 = 0.89626$

$\frac{N_1}{N_1-N_2} = 1.36456$

A = 1.36456

B = 1.86204

C = 2.54087

D = 3.46718

E = 4.73120

F = 0.73283

G = 0.53705

H = 0.39357

I = 0.28842

$\frac{N_1}{N_1-N_2}^{1} - A = 0.00000$

$\frac{N_1}{N_1-N_2}^{2} - B = 0.00000$

$\frac{N_1}{N_1-N_2}^{3} - C = 0.00000$

$\frac{N_1}{N_1-N_2}^{4} - D = 0.00000$

$\frac{N_1}{N_1-N_2}^{5} - E = 0.00000$

$\frac{N_1}{N_1-N_2}^{-1} - F = 0.00000$

$\frac{N_1}{N_1-N_2}^{-2} - G = 0.00000$

$\frac{N_1}{N_1-N_2}^{-3} - H = 0.00000$

$\frac{N_1}{N_1-N_2}^{-4} - I = 0.00000$

Plate 8

$\frac{N_1}{N_1-N_2} - A = 0.00000$

$\frac{N_1^2}{(N_1^2-2\cdot N_1\cdot N_2)+N_2^2} - B = 0.00000$

$\frac{N_1^3}{((N_1^3-3\cdot N_1^2\cdot N_2)+3\cdot N_1\cdot N_2^2)-N_2^3} - C = 0.00000$

$\frac{N_1^4}{(((N_1^4-4\cdot N_1^3\cdot N_2)+6\cdot N_1^2\cdot N_2^2)-4\cdot N_1\cdot N_2^3)+N_2^4} - D = 0.00000$

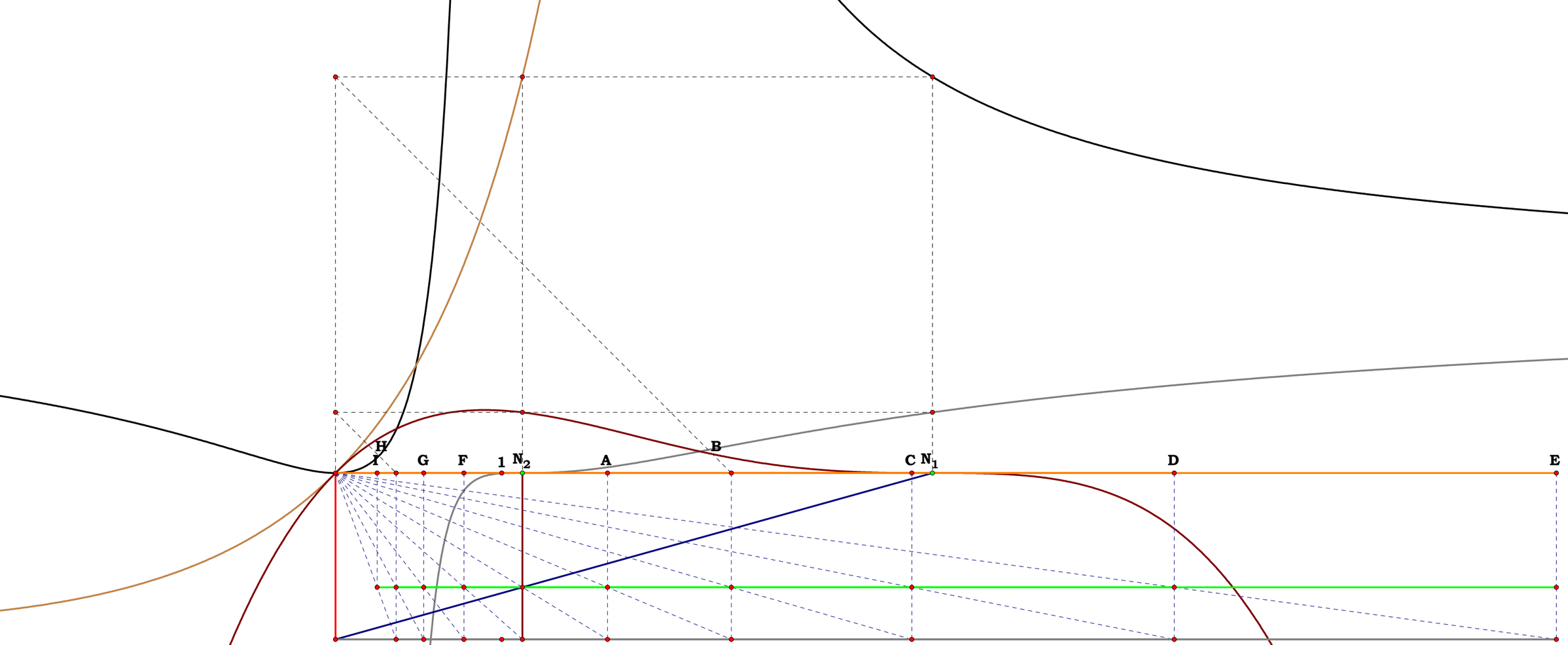
$\frac{N_1^5}{((((N_1^5-5\cdot N_1^4\cdot N_2)+10\cdot N_1^3\cdot N_2^2)-10\cdot N_1^2\cdot N_2^3)+5\cdot N_1\cdot N_2^4)-N_2^5} - E = 0.00000$

$\frac{(((N_1^4-4\cdot N_1^3\cdot N_2)+6\cdot N_1^2\cdot N_2^2)-4\cdot N_1\cdot N_2^3)+N_2^4}{N_1^4} - I = 0.00000$

$\frac{((N_1^3-3\cdot N_1^2\cdot N_2)+3\cdot N_1\cdot N_2^2)-N_2^3}{N_1^3} - H = 0.00000$

$\frac{(N_1^2-2\cdot N_1\cdot N_2)+N_2^2}{N_1^2} - G = 0.00000$

$\frac{N_1-N_2}{N_1} - F = 0.00000$



$N_1 = 3.58991$

$N_2 = 1.12360$

$\frac{N_1}{N_1-N_2} = 1.45558$

A = 1.63549
B = 2.38058
C = 3.46513
D = 5.04377
E = 7.34160
F = 0.77193
G = 0.53032
H = 0.36434
I = 0.25030

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{1} - A = 0.00000$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{2} - B = 0.00000$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{3} - C = 0.00000$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{4} - D = 0.00000$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{5} - E = 0.00000$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-1} - F = 0.00000$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-2} - G = 0.00000$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-3} - H = 0.00000$

$N_2 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-4} - I = 0.00000$

Plate 9

$\frac{N_1 \cdot N_2}{N_1-N_2} - A = 0.00000$

$\frac{N_1^2 \cdot N_2}{(N_1^2-2 \cdot N_1 \cdot N_2)+N_2^2} - B = 0.00000$

$\frac{N_1^3 \cdot N_2}{((N_1^3-3 \cdot N_1^2 \cdot N_2)+3 \cdot N_1 \cdot N_2^2)-N_2^3} - C = 0.00000$

$\frac{N_1^4 \cdot N_2}{(((N_1^4-4 \cdot N_1^3 \cdot N_2)+6 \cdot N_1^2 \cdot N_2^2)-4 \cdot N_1 \cdot N_2^3)+N_2^4} - D = 0.00000$

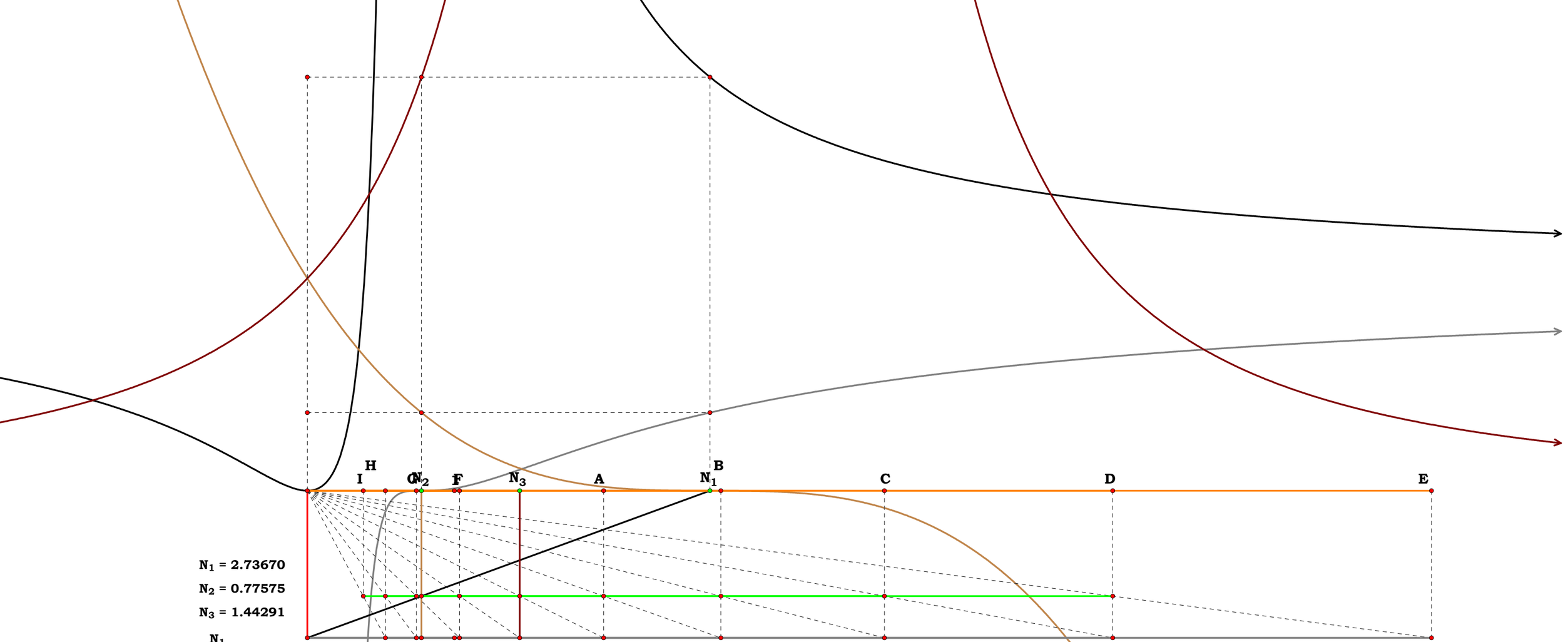
$\frac{N_1^5 \cdot N_2}{((((N_1^5-5 \cdot N_1^4 \cdot N_2)+10 \cdot N_1^3 \cdot N_2^2)-10 \cdot N_1^2 \cdot N_2^3)+5 \cdot N_1 \cdot N_2^4)-N_2^5} - E = 0.00000$

$\frac{(((N_1^4 \cdot N_2-4 \cdot N_1^3 \cdot N_2^2)+6 \cdot N_1^2 \cdot N_2^3)-4 \cdot N_1 \cdot N_2^4)+N_2^5}{N_1^4} - I = 0.00000$

$\frac{((N_1^3 \cdot N_2-3 \cdot N_1^2 \cdot N_2^2)+3 \cdot N_1 \cdot N_2^3)-N_2^4}{N_1^3} - H = 0.00000$

$\frac{(N_1^2 \cdot N_2-2 \cdot N_1 \cdot N_2^2)+N_2^3}{N_1^2} - G = 0.00000$

$\frac{N_1 \cdot N_2-N_2^2}{N_1} - F = 0.00000$



$N_1 = 2.73670$

$N_2 = 0.77575$

$N_3 = 1.44291$

$\frac{N_1}{N_1-N_2} = 1.39560$

$A = 2.01373$

$B = 2.81035$

$C = 3.92211$

$D = 5.47368$

$E = 7.63905$

$F = 1.03391$

$G = 0.74083$

$H = 0.53084$

$I = 0.38037$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{1} - A = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{2} - B = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{3} - C = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{4} - D = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{5} - E = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-1} - F = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-2} - G = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-3} - H = 0.00000$

$N_3 \cdot \left(\frac{N_1}{N_1-N_2}\right)^{-4} - I = 0.00000$

Plate 10

$\frac{N_1 \cdot N_3}{N_1-N_2} - A = 0.00000$

$\frac{N_1^2 \cdot N_3}{(N_1^2-2 \cdot N_1 \cdot N_2)+N_2^2} - B = 0.00000$

$\frac{N_1^3 \cdot N_3}{((N_1^3-3 \cdot N_1^2 \cdot N_2)+3 \cdot N_1 \cdot N_2^2)-N_2^3} - C = 0.00000$

$\frac{N_1^4 \cdot N_3}{(((N_1^4-4 \cdot N_1^3 \cdot N_2)+6 \cdot N_1^2 \cdot N_2^2)-4 \cdot N_1 \cdot N_2^3)+N_2^4} - D = 0.00000$

$\frac{N_1^5 \cdot N_3}{((((N_1^5-5 \cdot N_1^4 \cdot N_2)+10 \cdot N_1^3 \cdot N_2^2)-10 \cdot N_1^2 \cdot N_2^3)+5 \cdot N_1 \cdot N_2^4)-N_2^5} - E = 0.00000$

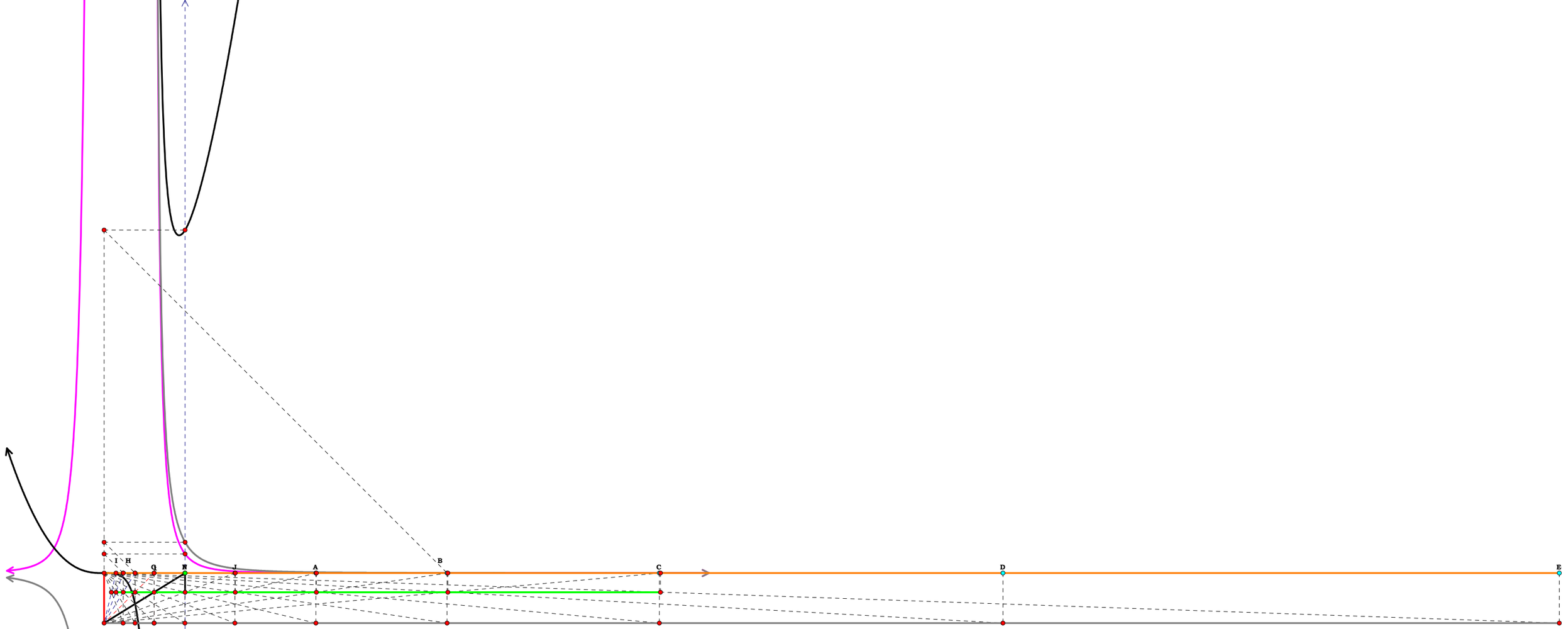
$\frac{(((N_1^4 \cdot N_3-4 \cdot N_1^3 \cdot N_2 \cdot N_3)+6 \cdot N_1^2 \cdot N_2^2 \cdot N_3)-4 \cdot N_1 \cdot N_2^3 \cdot N_3)+N_2^4 \cdot N_3}{N_1^4} - I = 0.00000$

$\frac{((N_1^3 \cdot N_3-3 \cdot N_1^2 \cdot N_2 \cdot N_3)+3 \cdot N_1 \cdot N_2^2 \cdot N_3)-N_2^3 \cdot N_3}{N_1^3} - H = 0.00000$

$\frac{(N_1^2 \cdot N_3-2 \cdot N_1 \cdot N_2 \cdot N_3)+N_2^2 \cdot N_3}{N_1^2} - G = 0.00000$

$\frac{N_1 \cdot N_3-N_2 \cdot N_3}{N_1} - F = 0.00000$

Zero from bottom then top.



$N = 1.61903$

$\frac{N}{N-1} = 2.61543$

J = 2.61543
A = 4.23445
B = 6.85572
C = 11.09942
D = 17.97062
E = 29.09458
F = 1.61543
G = 0.99778
H = 0.61628
I = 0.38065

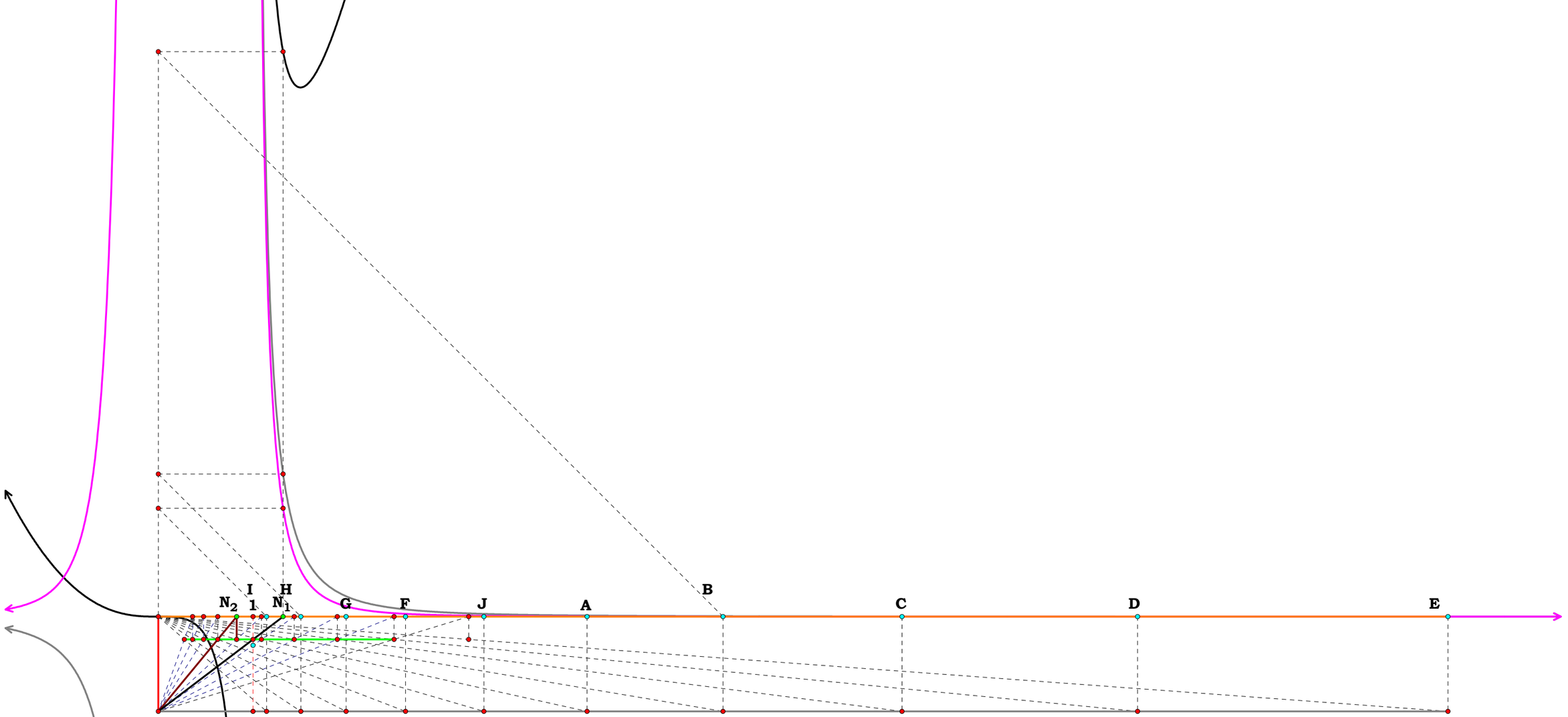
$N^0 \cdot \frac{N}{N-1} \cdot J = 0.00000$
$N^1 \cdot \frac{N}{N-1} \cdot A = 0.00000$
$N^2 \cdot \frac{N}{N-1} \cdot B = 0.00000$
$N^3 \cdot \frac{N}{N-1} \cdot C = 0.00000$
$N^4 \cdot \frac{N}{N-1} \cdot D = 0.00000$
$N^5 \cdot \frac{N}{N-1} \cdot E = 0.00000$

$N^{-1} \cdot \frac{N}{N-1} \cdot F = 0.00000$
$N^{-2} \cdot \frac{N}{N-1} \cdot G = 0.00000$
$N^{-3} \cdot \frac{N}{N-1} \cdot H = 0.00000$
$N^{-4} \cdot \frac{N}{N-1} \cdot I = 0.00000$

Plate 11

$\frac{N}{N-1} \cdot J = 0.00000$
$\frac{N^2}{N-1} \cdot A = 0.00000$
$\frac{N^3}{N-1} \cdot B = 0.00000$
$\frac{N^4}{N-1} \cdot C = 0.00000$
$\frac{N^5}{N-1} \cdot D = 0.00000$
$\frac{N^6}{N-1} \cdot E = 0.00000$

$\frac{1}{N-1} \cdot F = 0.00000$
$\frac{1}{N^2-N} \cdot G = 0.00000$
$\frac{1}{N^3 \cdot N^2} \cdot H = 0.00000$
$\frac{1}{N^4 \cdot N^3} \cdot I = 0.00000$



$N_1 = 1.31693$

$N_2 = 0.82679$

$\frac{N_1 \cdot N_2}{N_1 - 1} = 3.43551$

J = 3.43551
A = 4.52433
B = 5.95822
C = 7.84657
D = 10.33339
E = 13.60837
F = 2.60872
G = 1.98091
H = 1.50419
I = 1.14219

$N_1^0 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - J = 0.00000$

$N_1^1 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - A = 0.00000$

$N_1^2 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - B = 0.00000$

$N_1^3 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - C = 0.00000$

$N_1^4 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - D = 0.00000$

$N_1^5 \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - E = 0.00000$

$N_1^{-1} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - F = 0.00000$

$N_1^{-2} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - G = 0.00000$

$N_1^{-3} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - H = 0.00000$

$N_1^{-4} \cdot \frac{N_1 \cdot N_2}{N_1 - 1} - I = 0.00000$

Plate 12

$\frac{N_1 \cdot N_2}{N_1 - 1} - J = 0.00000$

$\frac{N_1^2 \cdot N_2}{N_1 - 1} - A = 0.00000$

$\frac{N_1^3 \cdot N_2}{N_1 - 1} - B = 0.00000$

$\frac{N_1^4 \cdot N_2}{N_1 - 1} - C = 0.00000$

$\frac{N_1^5 \cdot N_2}{N_1 - 1} - D = 0.00000$

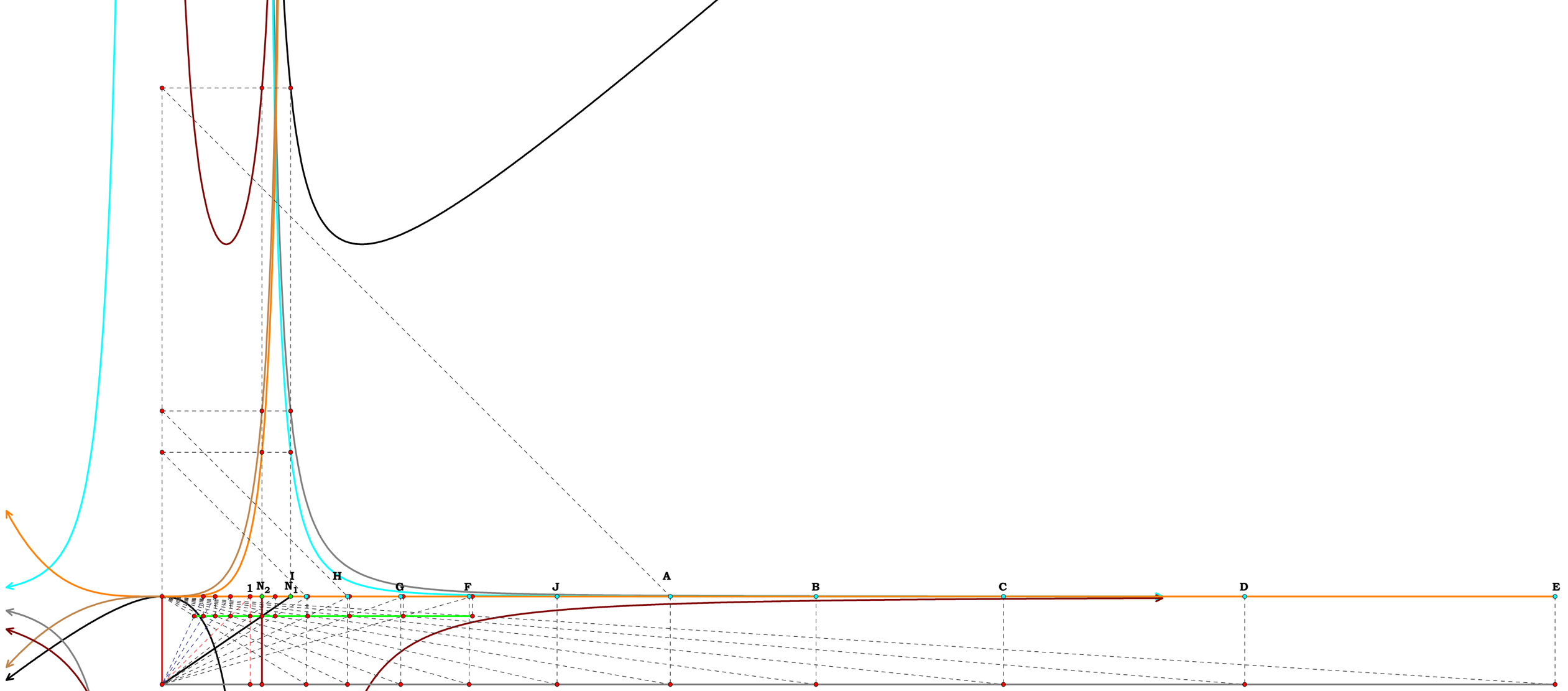
$\frac{N_1^6 \cdot N_2}{N_1 - 1} - E = 0.00000$

$\frac{N_2}{N_1 - 1} - F = 0.00000$

$\frac{N_2}{N_1^2 - N_1} - G = 0.00000$

$\frac{N_2}{N_1^3 - N_1^2} - H = 0.00000$

$\frac{N_2}{N_1^4 - N_1^3} - I = 0.00000$



$N_1 = 1.46046$

$N_2 = 1.13509$

$\frac{N_1}{N_2} = 1.28665$

$\frac{N_1}{N_1-N_2} = 4.48863$

J = 4.48863

A = 5.77527

B = 7.43073

C = 9.56072

D = 12.30126

E = 15.82736

F = 3.48863

G = 2.71141

H = 2.10735

I = 1.63736

$\frac{N_1^{\,0}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-J = 0.00000

$\frac{N_1^{\,1}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-A = 0.00000

$\frac{N_1^{\,2}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-B = 0.00000

$\frac{N_1^{\,3}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-C = 0.00000

$\frac{N_1^{\,4}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-D = 0.00000

$\frac{N_1^{\,5}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-E = 0.00000

$\frac{N_1^{\,-1}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-F = 0.00000

$\frac{N_1^{\,-2}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-G = 0.00000

$\frac{N_1^{\,-3}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-H = 0.00000

$\frac{N_1^{\,-4}}{N_2}\cdot\frac{N_1}{N_1-N_2}$-I = 0.00000

Plate 13

$\frac{N_1}{N_1-N_2}$-J = 0.00000

$\frac{N_1^{\,2}}{N_1\cdot N_2-N_2^{\,2}}$-A = 0.00000

$\frac{N_1^{\,3}}{N_1\cdot N_2^{\,2}-N_2^{\,3}}$-B = 0.00000

$\frac{N_1^{\,4}}{N_1\cdot N_2^{\,3}-N_2^{\,4}}$-C = 0.00000

$\frac{N_1^{\,5}}{N_1\cdot N_2^{\,4}-N_2^{\,5}}$-D = 0.00000

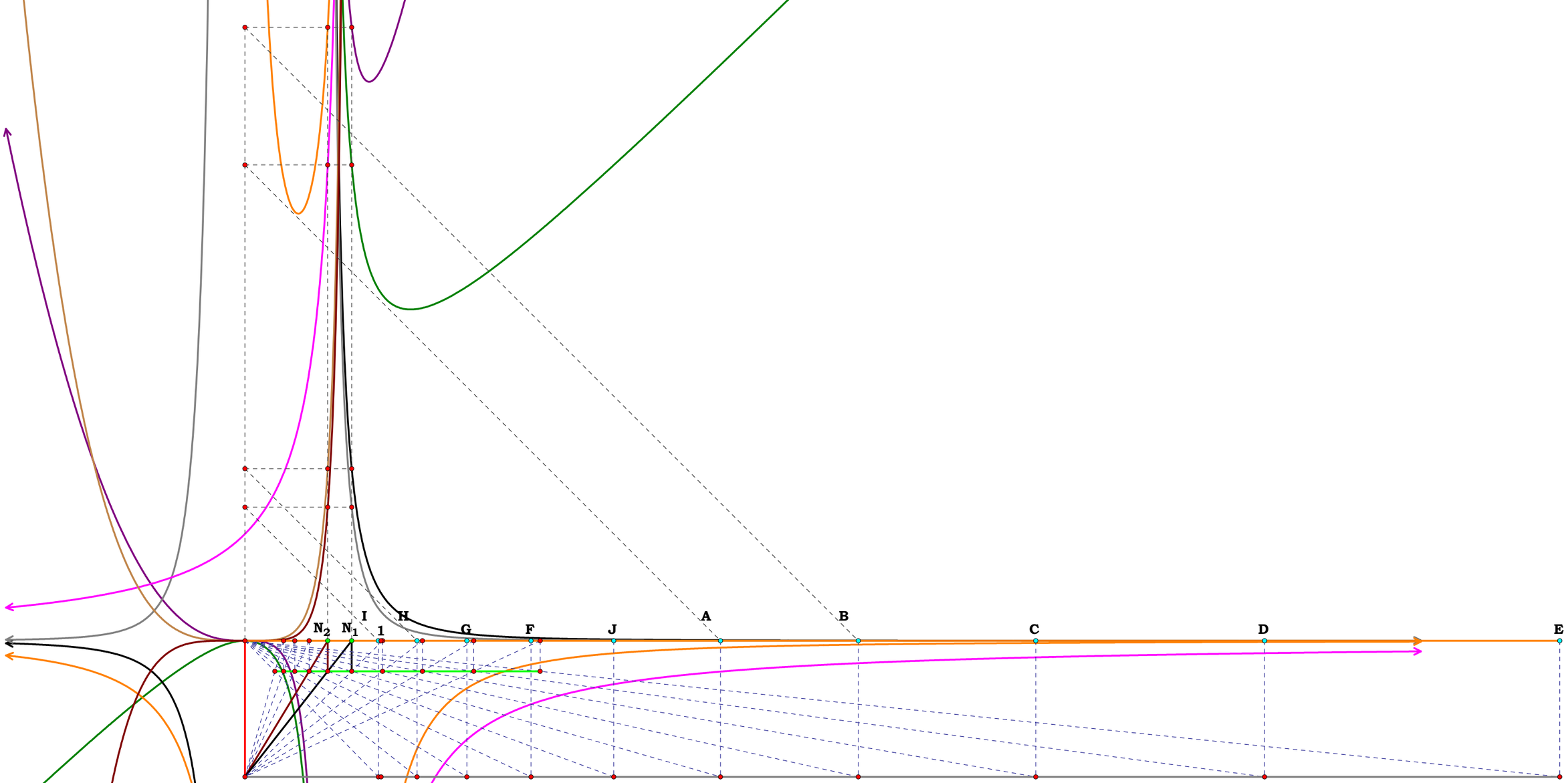
$\frac{N_1^{\,6}}{N_1\cdot N_2^{\,5}-N_2^{\,6}}$-E = 0.00000

$\frac{N_2}{N_1-N_2}$-F = 0.00000

$\frac{N_2^{\,2}}{N_1^{\,2}-N_1\cdot N_2}$-G = 0.00000

$\frac{N_2^{\,3}}{N_1^{\,3}-N_1^{\,2}\cdot N_2}$-H = 0.00000

$\frac{N_2^{\,4}}{N_1^{\,4}-N_1^{\,3}\cdot N_2}$-I = 0.00000



$N_1 = 0.78415$

$N_2 = 0.60814$

$\frac{N_1}{N_2} = 1.28943$

$\frac{N_1 \cdot N_2}{N_1 - N_2} = 2.70928$

J = 2.70928

A = 3.49343

B = 4.50454

C = 5.80830

D = 7.48941

E = 9.65708

F = 2.10114

G = 1.62951

H = 1.26374

I = 0.98008

$\frac{N_1^{\,0}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -J = 0.00000

$\frac{N_1^{\,1}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -A = 0.00000

$\frac{N_1^{\,2}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -B = 0.00000

$\frac{N_1^{\,3}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -C = 0.00000

$\frac{N_1^{\,4}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -D = 0.00000

$\frac{N_1^{\,5}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -E = 0.00000

$\frac{N_1^{\,-1}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -F = 0.00000

$\frac{N_1^{\,-2}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -G = 0.00000

$\frac{N_1^{\,-3}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -H = 0.00000

$\frac{N_1^{\,-4}}{N_2} \cdot \frac{N_1 \cdot N_2}{N_1 - N_2}$ -I = 0.00000

Plate 14

$\frac{N_1 \cdot N_2}{N_1 - N_2}$ -J = 0.00000

$\frac{N_1^{\,2}}{N_1 - N_2}$ -A = 0.00000

$\frac{N_1^{\,3}}{N_1 \cdot N_2 - N_2^{\,2}}$ -B = 0.00000

$\frac{N_1^{\,4}}{N_1 \cdot N_2^{\,2} - N_2^{\,3}}$ -C = 0.00000

$\frac{N_1^{\,5}}{N_1 \cdot N_2^{\,3} - N_2^{\,4}}$ -D = 0.00000

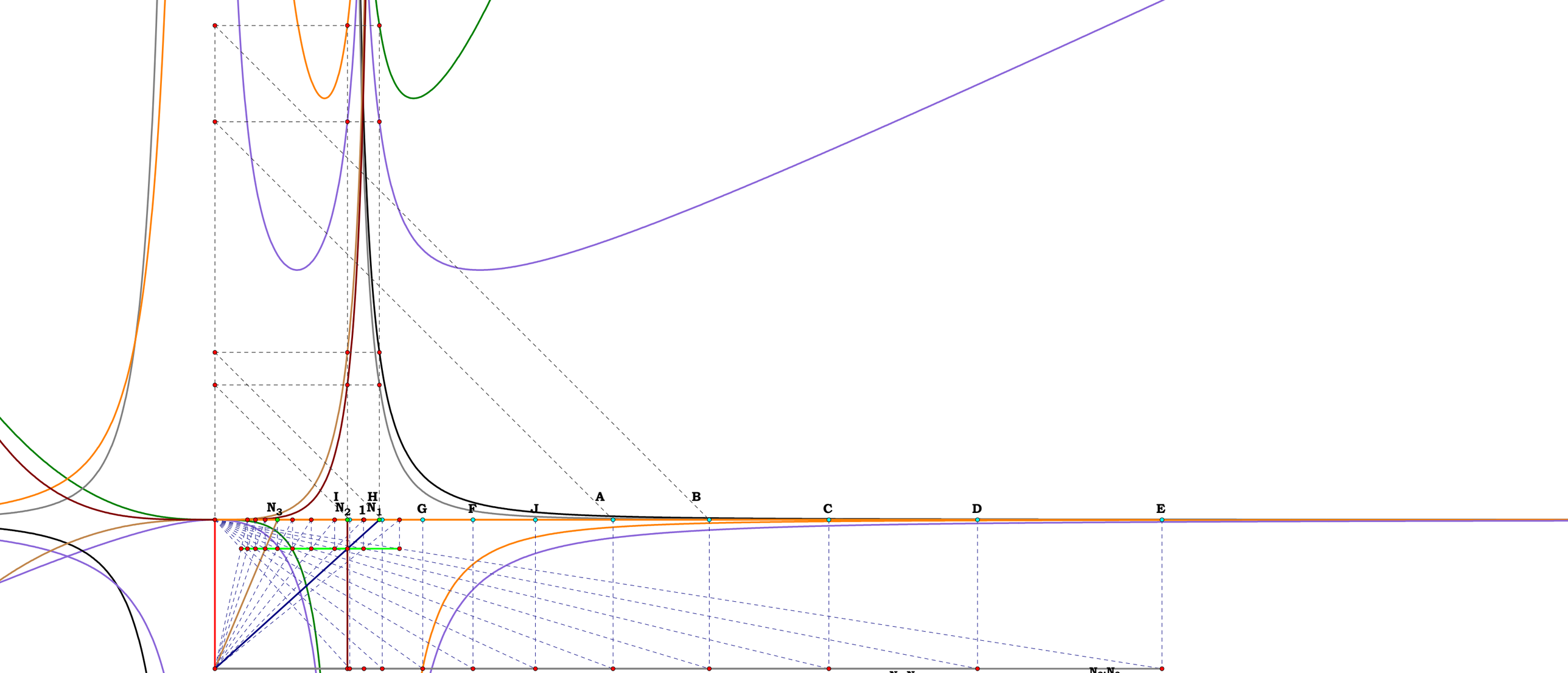
$\frac{N_1^{\,6}}{N_1 \cdot N_2^{\,4} - N_2^{\,5}}$ -E = 0.00000

$\frac{N_2^{\,2}}{N_1 - N_2}$ -F = 0.00000

$\frac{N_2^{\,3}}{N_1^{\,2} - N_1 \cdot N_2}$ -G = 0.00000

$\frac{N_2^{\,4}}{N_1^{\,3} - N_1^{\,2} \cdot N_2}$ -H = 0.00000

$\frac{N_2^{\,5}}{N_1^{\,4} - N_1^{\,3} \cdot N_2}$ -I = 0.00000



$N_1 = 1.10350$

$N_2 = 0.88853$

$N_3 = 0.41903$

$\frac{N_1}{N_2} = 1.24195$

$\frac{N_1 \cdot N_3}{N_1 - N_2} = 2.15096$

J = 2.15096

A = 2.67138

B = 3.31772

C = 4.12043

D = 5.11735

E = 6.35548

F = 1.73193

G = 1.39453

H = 1.12286

I = 0.90411

$\frac{N_1^{\,0}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - J = 0.00000$

$\frac{N_1^{\,1}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - A = 0.00000$

$\frac{N_1^{\,2}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - B = 0.00000$

$\frac{N_1^{\,3}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - C = 0.00000$

$\frac{N_1^{\,4}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - D = 0.00000$

$\frac{N_1^{\,5}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - E = 0.00000$

Plate 15

$\frac{N_1^{\,-1}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - F = 0.00000$

$\frac{N_1^{\,-2}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - G = 0.00000$

$\frac{N_1^{\,-3}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - H = 0.00000$

$\frac{N_1^{\,-4}}{N_2} \cdot \frac{N_1 \cdot N_3}{N_1 - N_2} - I = 0.00000$

$\frac{N_1 \cdot N_3}{N_1 - N_2} - J = 0.00000$

$\frac{N_1^{\,2} \cdot N_3}{N_1 \cdot N_2 - N_2^{\,2}} - A = 0.00000$

$\frac{N_1^{\,3} \cdot N_3}{N_1 \cdot N_2^{\,2} - N_2^{\,3}} - B = 0.00000$

$\frac{N_1^{\,4} \cdot N_3}{N_1 \cdot N_2^{\,3} - N_2^{\,4}} - C = 0.00000$

$\frac{N_1^{\,5} \cdot N_3}{N_1 \cdot N_2^{\,4} - N_2^{\,5}} - D = 0.00000$

$\frac{N_1^{\,6} \cdot N_3}{N_1 \cdot N_2^{\,5} - N_2^{\,6}} - E = 0.00000$

$\frac{N_2 \cdot N_3}{N_1 - N_2} - F = 0.00000$

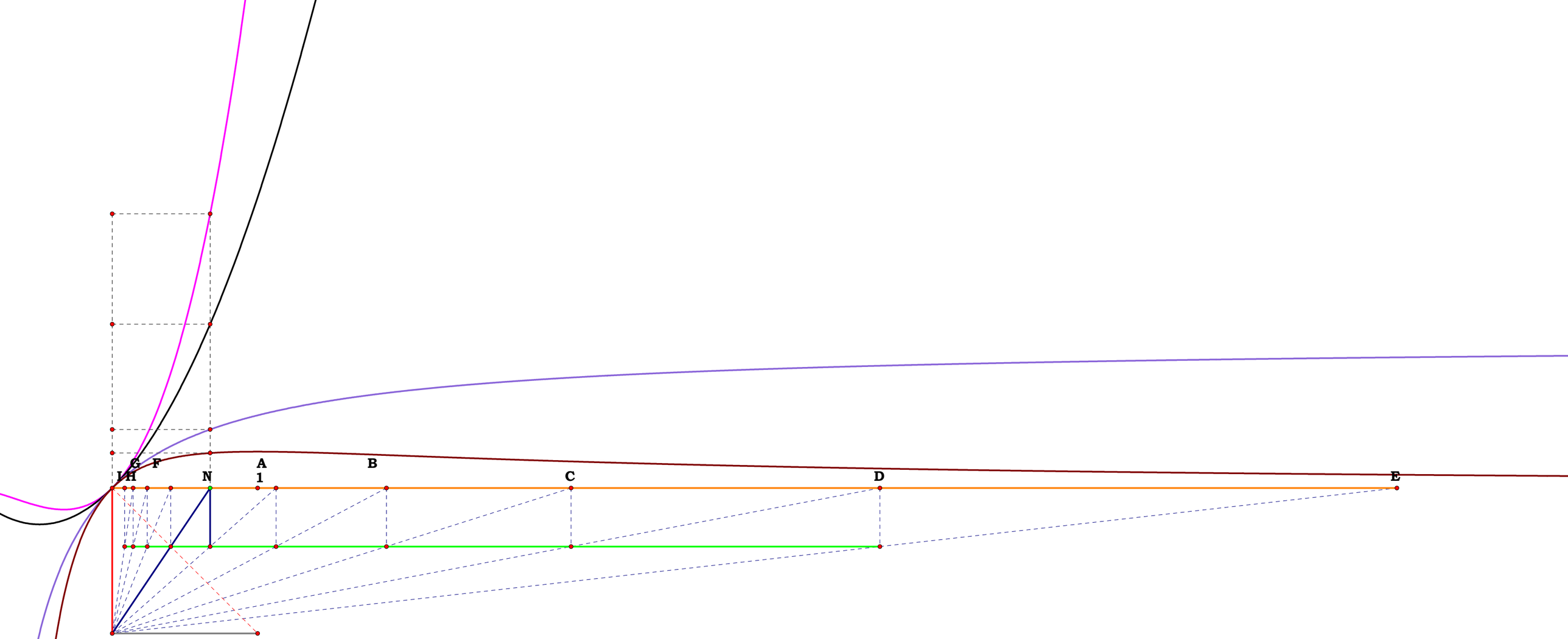
$\frac{N_2^{\,2} \cdot N_3}{N_1^{\,2} - N_1 \cdot N_2} - G = 0.00000$

$\frac{N_2^{\,3} \cdot N_3}{N_1^{\,3} - N_1^{\,2} \cdot N_2} - H = 0.00000$

$\frac{N_2^{\,4} \cdot N_3}{N_1^{\,4} - N_1^{\,3} \cdot N_2} - I = 0.00000$

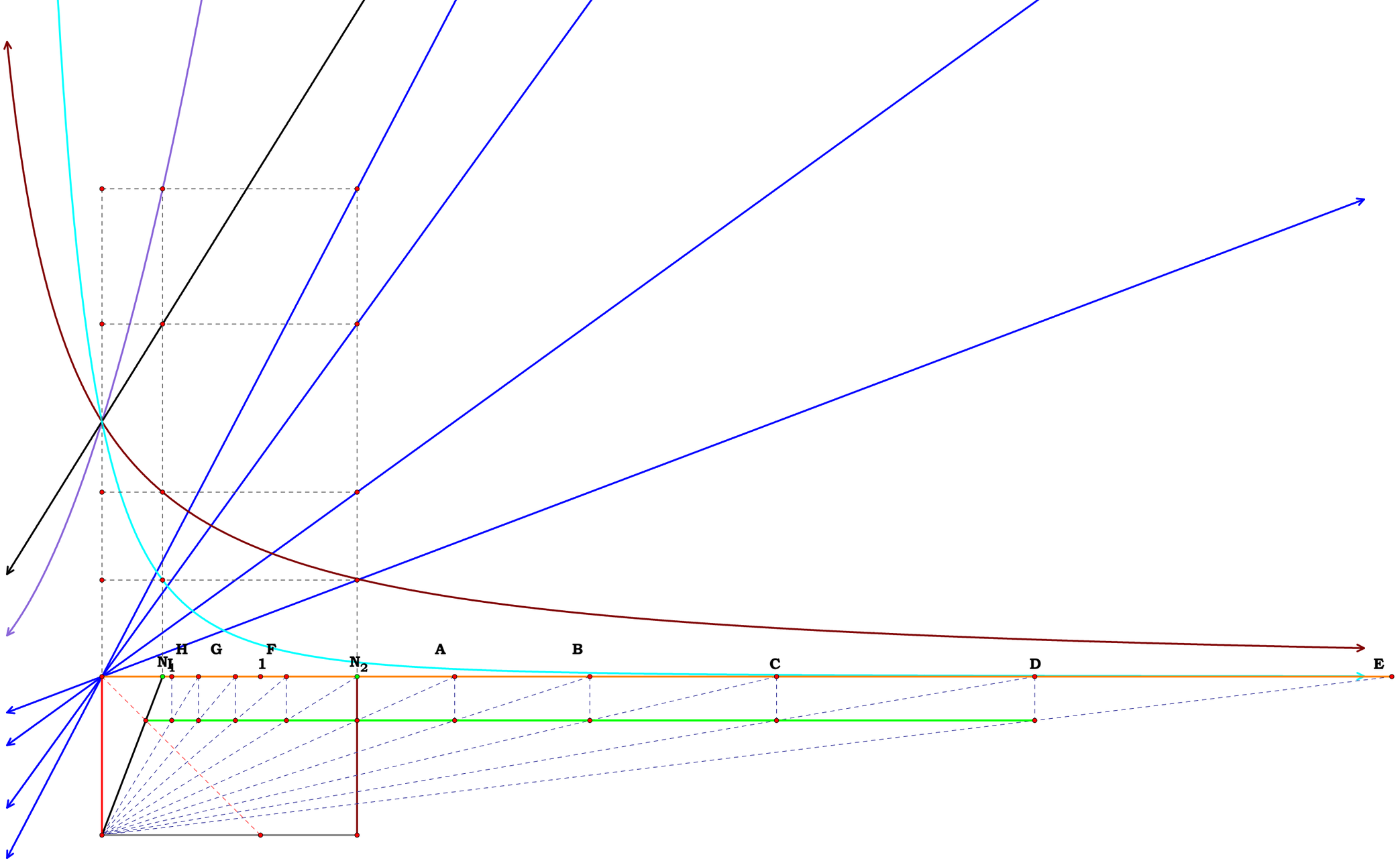
Exponential Series Notebook 2

Zero from bottom.



N = 0.67329

A = 1.12662	$N\cdot(N+1)^{1}-A = 0.00000$
B = 1.88516	$N\cdot(N+1)^{2}-B = 0.00000$
C = 3.15443	$N\cdot(N+1)^{3}-C = 0.00000$
D = 5.27830	$N\cdot(N+1)^{4}-D = 0.00000$
E = 8.83214	$N\cdot(N+1)^{5}-E = 0.00000$
F = 0.40238	$N\cdot(N+1)^{-1}-F = 0.00000$
G = 0.24047	$N\cdot(N+1)^{-2}-G = 0.00000$
H = 0.14371	$N\cdot(N+1)^{-3}-H = 0.00000$
I = 0.08588	$N\cdot(N+1)^{-4}-I = 0.00000$



$N_1 = 0.38279$

$N_2 = 1.60857$

$A = 2.22432$

$B = 3.07576$

$C = 4.25313$

$D = 5.88118$

$E = 8.13244$

$F = 1.16328$

$G = 0.84126$

$H = 0.60838$

$I = 0.43996$

$N_2 \cdot (N_1+1)^1 - A = 0.00000$

$N_2 \cdot (N_1+1)^2 - B = 0.00000$

$N_2 \cdot (N_1+1)^3 - C = 0.00000$

$N_2 \cdot (N_1+1)^4 - D = 0.00000$

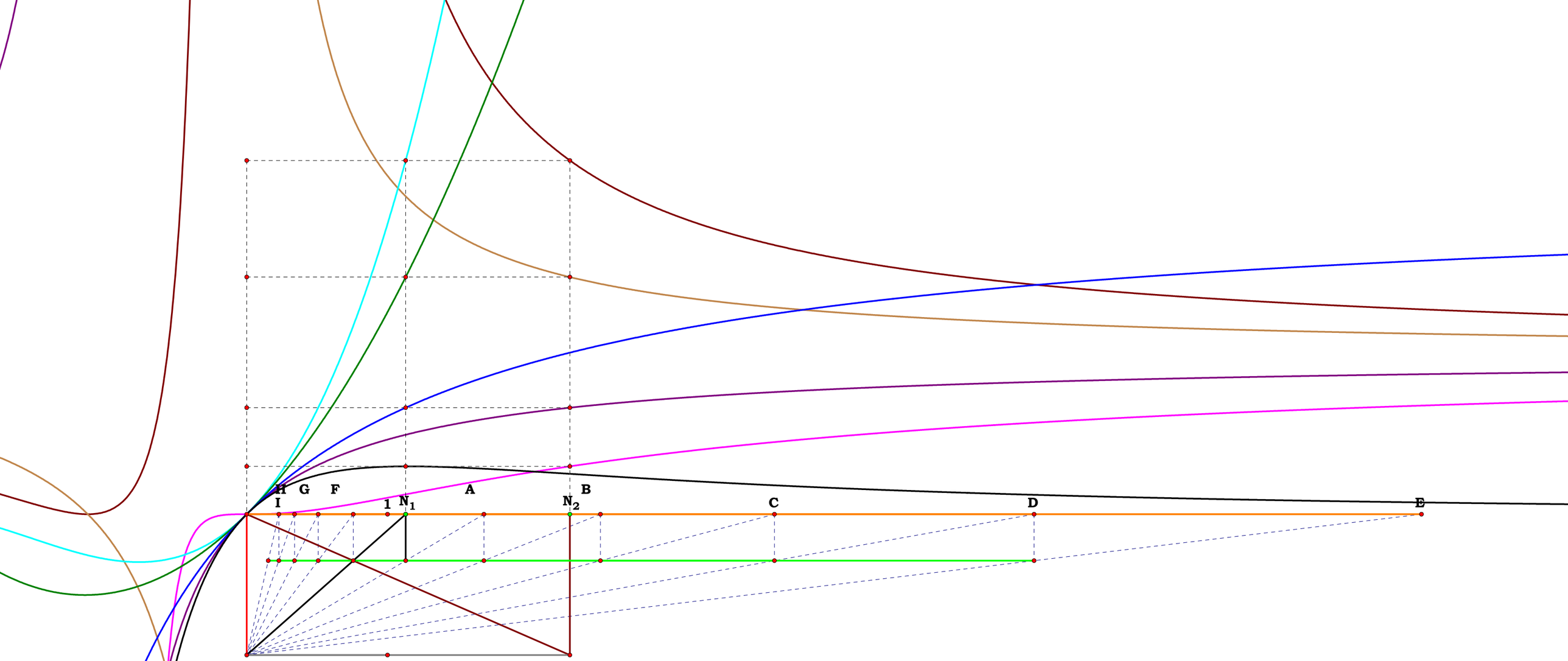
$N_2 \cdot (N_1+1)^5 - E = 0.00000$

$N_2 \cdot (N_1+1)^{-1} - F = 0.00000$

$N_2 \cdot (N_1+1)^{-2} - G = 0.00000$

$N_2 \cdot (N_1+1)^{-3} - H = 0.00000$

$N_2 \cdot (N_1+1)^{-4} - I = 0.00000$



$N_1 = 1.12857$

$N_2 = 2.29441$

$A = 1.68369$

$B = 2.51186$

$C = 3.74738$

$D = 5.59064$

$E = 8.34056$

$F = 0.75648$

$G = 0.50706$

$H = 0.33988$

$I = 0.22782$

$N_1 \cdot \frac{N_1+N_2}{N_2}^{1} - A = 0.00000$

$N_1 \cdot \frac{N_1+N_2}{N_2}^{2} - B = 0.00000$

$N_1 \cdot \frac{N_1+N_2}{N_2}^{3} - C = 0.00000$

$N_1 \cdot \frac{N_1+N_2}{N_2}^{4} - D = 0.00000$

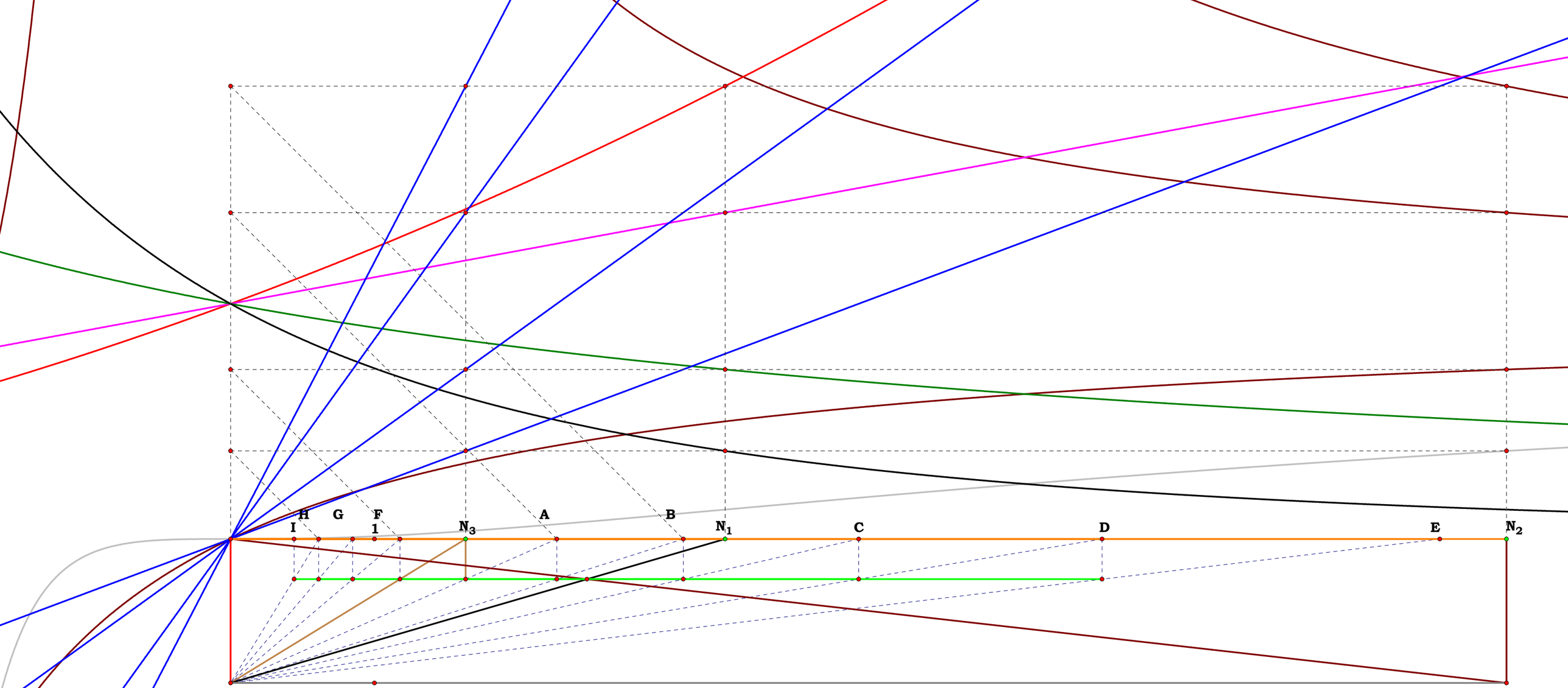
$N_1 \cdot \frac{N_1+N_2}{N_2}^{5} - E = 0.00000$

$N_1 \cdot \frac{N_1+N_2}{N_2}^{-1} - F = 0.00000$

$N_1 \cdot \frac{N_1+N_2}{N_2}^{-2} - G = 0.00000$

$N_1 \cdot \frac{N_1+N_2}{N_2}^{-3} - H = 0.00000$

$N_1 \cdot \frac{N_1+N_2}{N_2}^{-4} - I = 0.00000$



$N_1 = 3.43566$

$N_2 = 8.86571$

$N_3 = 1.63369$

A = 2.26679

B = 3.14522

C = 4.36406

D = 6.05523

E = 8.40177

F = 1.17742

G = 0.84858

H = 0.61158

I = 0.44077

$N_3 \cdot \frac{N_1+N_2}{N_2}^{1} - A = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_2}^{2} - B = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_2}^{3} - C = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_2}^{4} - D = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_2}^{5} - E = 0.00000$

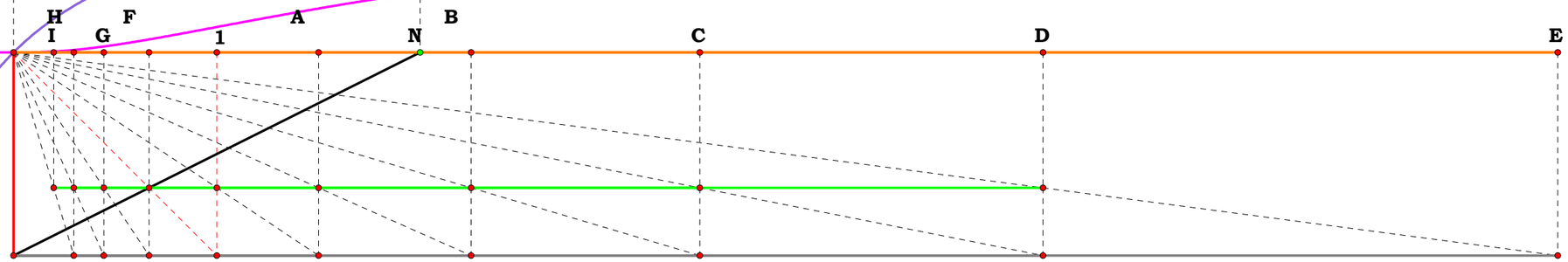
$N_3 \cdot \frac{N_1+N_2}{N_2}^{-1} - F = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_2}^{-2} - G = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_2}^{-3} - H = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_2}^{-4} - I = 0.00000$

Zero from top.



N = 2.00000

A = 1.50000

B = 2.25000

C = 3.37500

D = 5.06250

E = 7.59375

$\frac{N+1}{N}^{1}$ -A = 0.00000

$\frac{N+1}{N}^{2}$ -B = 0.00000

$\frac{N+1}{N}^{3}$ -C = 0.00000

$\frac{N+1}{N}^{4}$ -D = 0.00000

$\frac{N+1}{N}^{5}$ -E = 0.00000

F = 0.66667

G = 0.44444

H = 0.29630

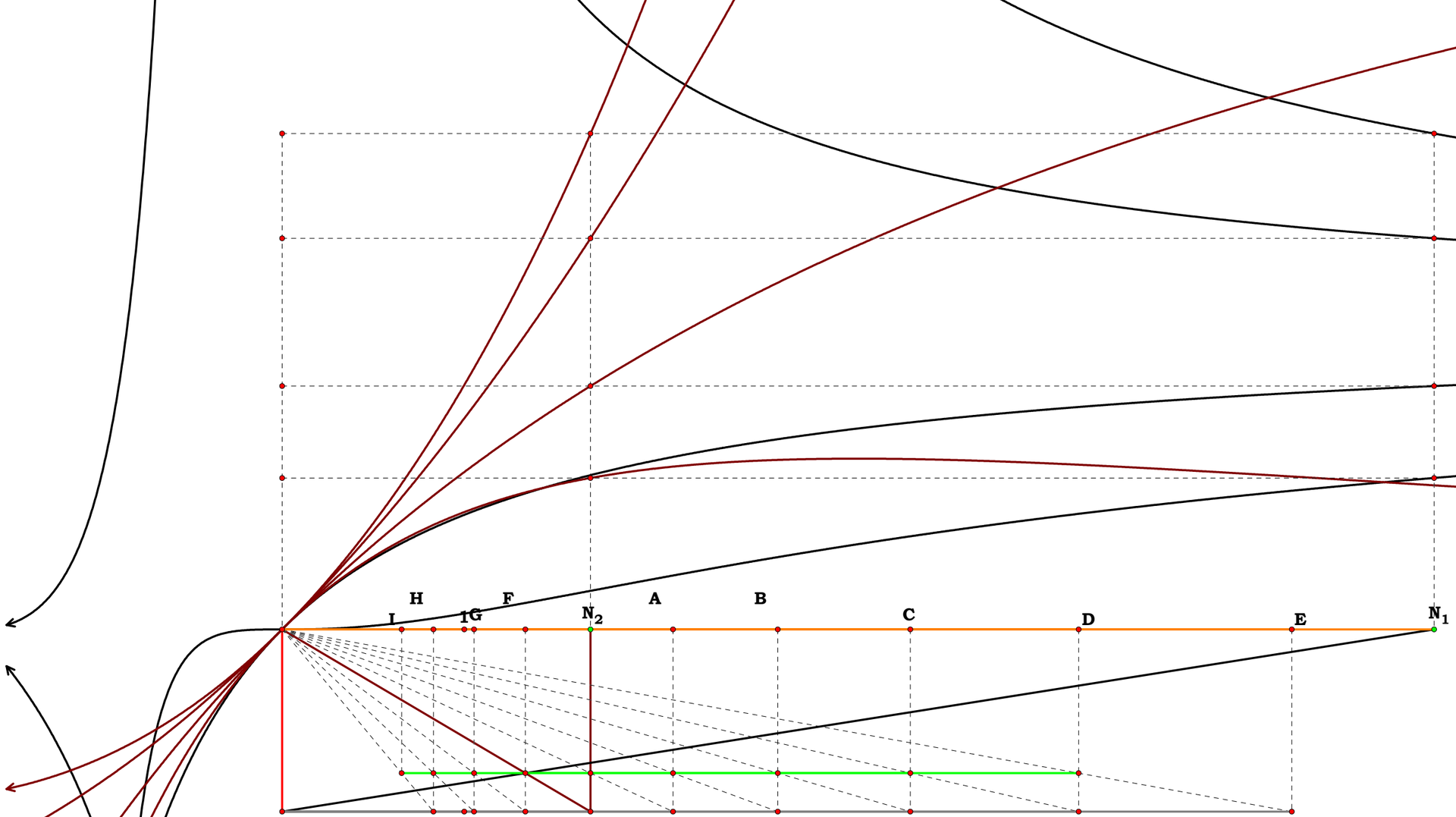
I = 0.19753

$\frac{N+1}{N}^{-1}$ -F = 0.00000

$\frac{N+1}{N}^{-2}$ -G = 0.00000

$\frac{N+1}{N}^{-3}$ -H = 0.00000

$\frac{N+1}{N}^{-4}$ -I = 0.00000



$N_1 = 6.32383$

$N_2 = 1.69284$

$A = 2.14600$

$B = 2.72047$

$C = 3.44872$

$D = 4.37192$

$E = 5.54225$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{1} - A = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{2} - B = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{3} - C = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{4} - D = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{5} - E = 0.00000$

$F = 1.33537$

$G = 1.05339$

$H = 0.83095$

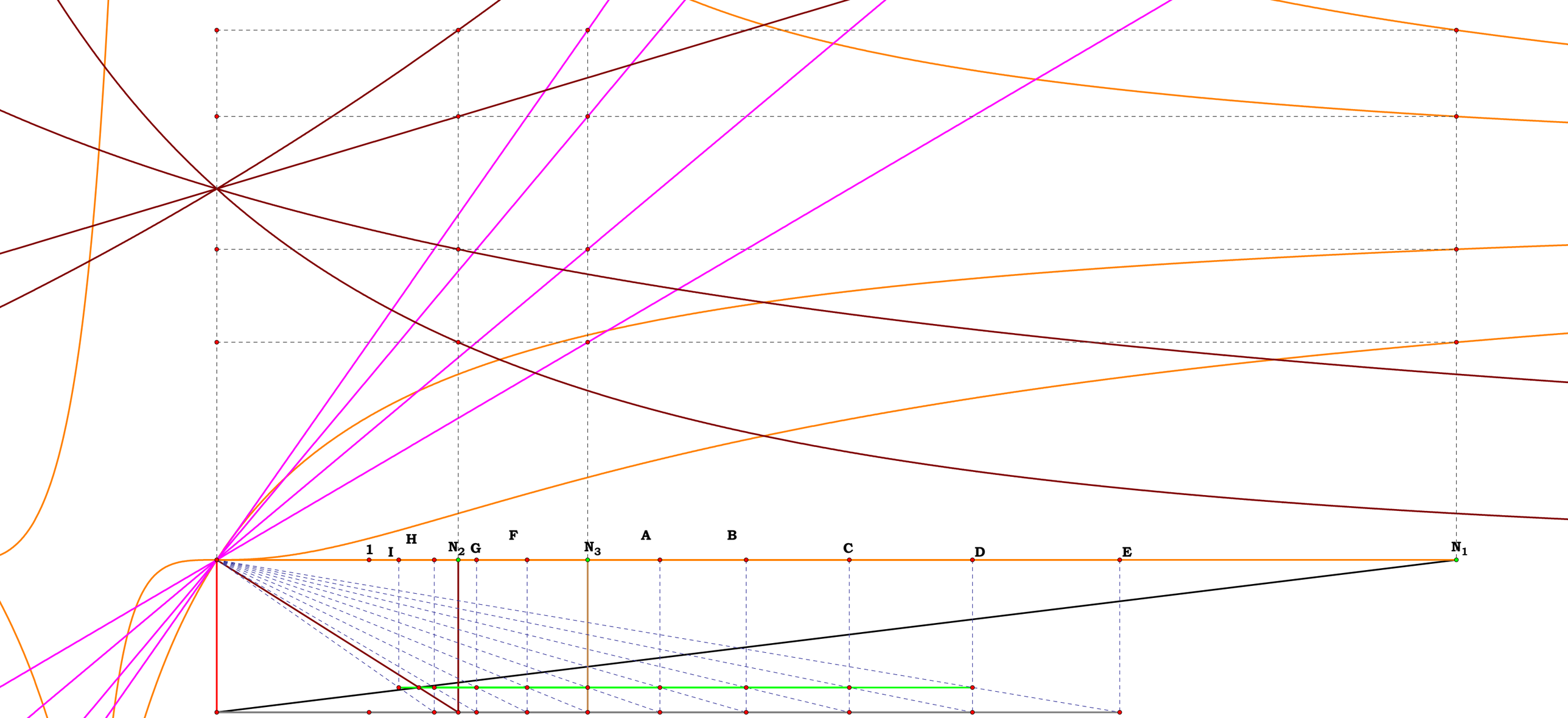
$I = 0.65548$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{-1} - F = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{-2} - G = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{-3} - H = 0.00000$

$N_2 \cdot \frac{N_1+N_2}{N_1}^{-4} - I = 0.00000$



$N_1 = 8.13593$

$N_3 = 2.43410$

$N_2 = 1.58466$

$\frac{N_1+N_2}{N_1} = 1.19477$

$A = 2.90820$

$B = 3.47463$

$C = 4.15140$

$D = 4.95998$

$E = 5.92605$

$N_3 \cdot \frac{N_1+N_2}{N_1} - A = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_1}^{2} - B = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_1}^{3} - C = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_1}^{4} - D = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_1}^{5} - E = 0.00000$

$F = 2.03729$

$G = 1.70517$

$H = 1.42719$

$I = 1.19453$

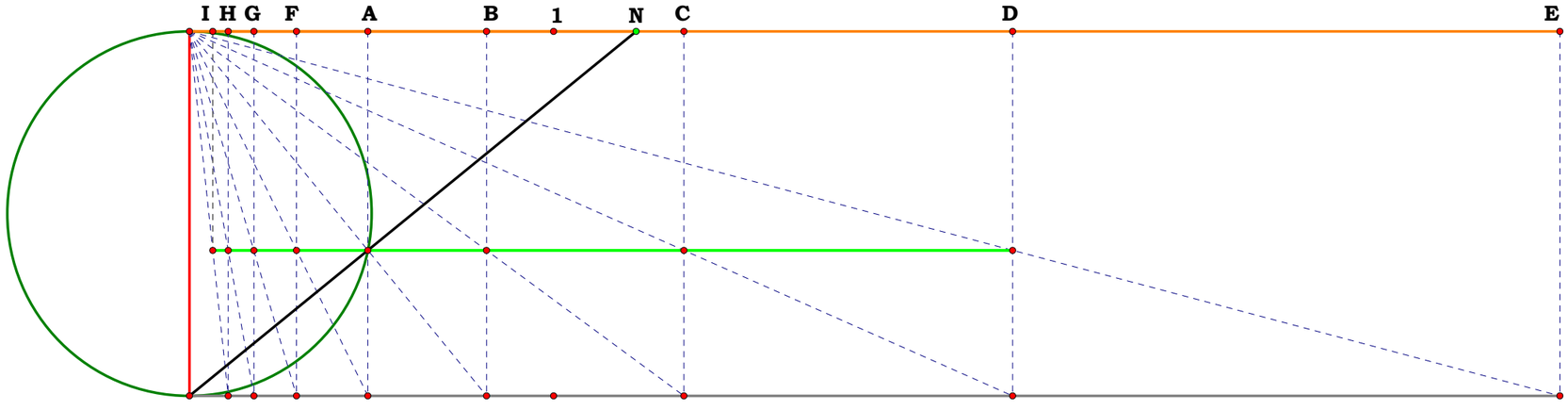
$N_3 \cdot \frac{N_1+N_2}{N_1}^{-1} - F = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_1}^{-2} - G = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_1}^{-3} - H = 0.00000$

$N_3 \cdot \frac{N_1+N_2}{N_1}^{-4} - I = 0.00000$

Exponential Series Notebook 3



$\frac{N}{N^2+1} = 0.48977$

$\frac{N^2+1}{N^2} = 1.66488$

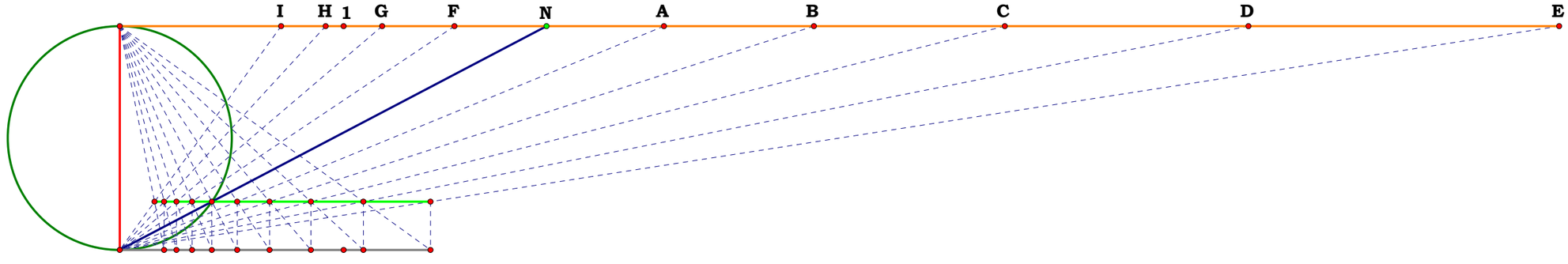
$N = 1.22639$

$A = 0.48977$
$B = 0.81540$
$C = 1.35755$
$D = 2.26016$
$E = 3.76290$

$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{0} - A = 0.00000$
$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{1} - B = 0.00000$
$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{2} - C = 0.00000$
$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{3} - D = 0.00000$
$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{4} - E = 0.00000$

$F = 0.29417$
$G = 0.17669$
$H = 0.10613$
$I = 0.06375$

$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{-1} - F = 0.00000$
$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{-2} - G = 0.00000$
$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{-3} - H = 0.00000$
$\frac{N}{N^2+1} \cdot \frac{N^2+1}{N^2}^{-4} - I = 0.00000$



$$\frac{N^2+1}{N^2} = 1.27525$$

$$\frac{N^2+1}{N} = 2.43071$$

$$N+\frac{1}{N} = 2.43071$$

$$N = 1.90607$$

A = 2.43071
B = 3.09976
C = 3.95295
D = 5.04098
E = 6.42849

$$\frac{N^2+1}{N}\cdot\frac{N^2+1}{N^2}^{0} - A = 0.00000$$

$$\frac{N^2+1}{N}\cdot\frac{N^2+1}{N^2}^{1} - B = 0.00000$$

$$\frac{N^2+1}{N}\cdot\frac{N^2+1}{N^2}^{2} - C = 0.00000$$

$$\frac{N^2+1}{N}\cdot\frac{N^2+1}{N^2}^{3} - D = 0.00000$$

$$\frac{N^2+1}{N}\cdot\frac{N^2+1}{N^2}^{4} - E = 0.00000$$

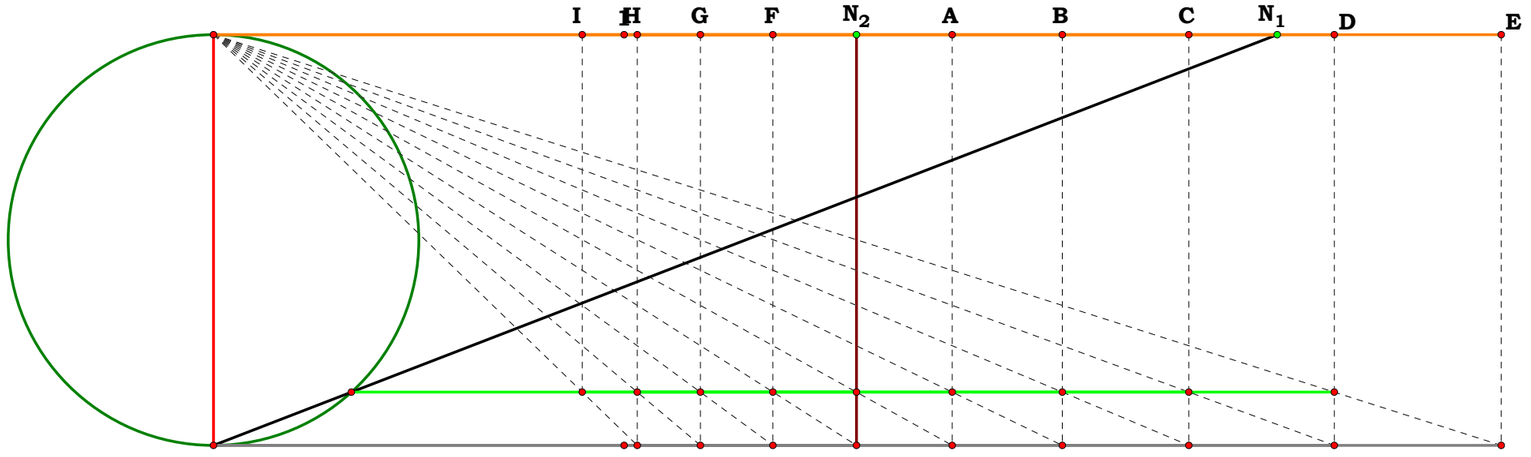
F = 1.49467
G = 1.17207
H = 0.91909
I = 0.72072

$$\frac{N^2+1}{N}\cdot\frac{N^2+1}{N^2}^{-2} - F = 0.00000$$

$$\frac{N^2+1}{N}\cdot\frac{N^2+1}{N^2}^{-3} - G = 0.00000$$

$$\frac{N^2+1}{N}\cdot\frac{N^2+1}{N^2}^{-4} - H = 0.00000$$

$$\frac{N^2+1}{N}\cdot\frac{N^2+1}{N^2}^{-5} - I = 0.00000$$



$$\frac{N_1^2+1}{N_1^2} = 1.14908$$

$$\frac{N_2\cdot(N_1^2+1)}{N_1^2} = 1.79864$$

$N_1 = 2.58997$

$N_2 = 1.56529$

A = 1.79864 $\quad \frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{0} - A = 0.00000$

B = 2.06677 $\quad \frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{1} - B = 0.00000$

C = 2.37488 $\quad \frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{2} - C = 0.00000$

D = 2.72892 $\quad \frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{3} - D = 0.00000$

E = 3.13573 $\quad \frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{4} - E = 0.00000$

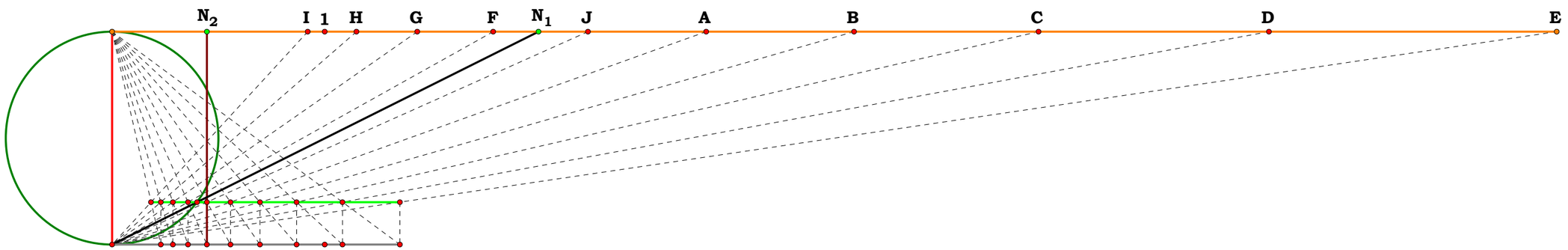
F = 1.36221 $\quad \frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{-2} - F = 0.00000$

G = 1.18549

H = 1.03169 $\quad \frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{-3} - G = 0.00000$

I = 0.89784 $\quad \frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{-4} - H = 0.00000$

$\frac{N_2\cdot(N_1^2+1)}{N_1^2}\cdot\frac{N_1^2+1}{N_1^2}^{-5} - I = 0.00000$



$N_2 \cdot (N_1^2+1) = 2.23722$

$\frac{N_1^2+1}{N_1^2} = 1.24872$

$N_1 = 2.00514$

$N_2 = 0.44561$

$A = 2.79366$
$B = 3.48849$
$C = 4.35614$
$D = 5.43960$
$E = 6.79253$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,1}}{N_1^2} - A = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,2}}{N_1^2} - B = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,3}}{N_1^2} - C = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,4}}{N_1^2} - D = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,5}}{N_1^2} - E = 0.00000$

$J = 2.23722$
$F = 1.79161$
$G = 1.43476$
$H = 1.14898$
$I = 0.92013$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,0}}{N_1^2} - J = 0.00000$

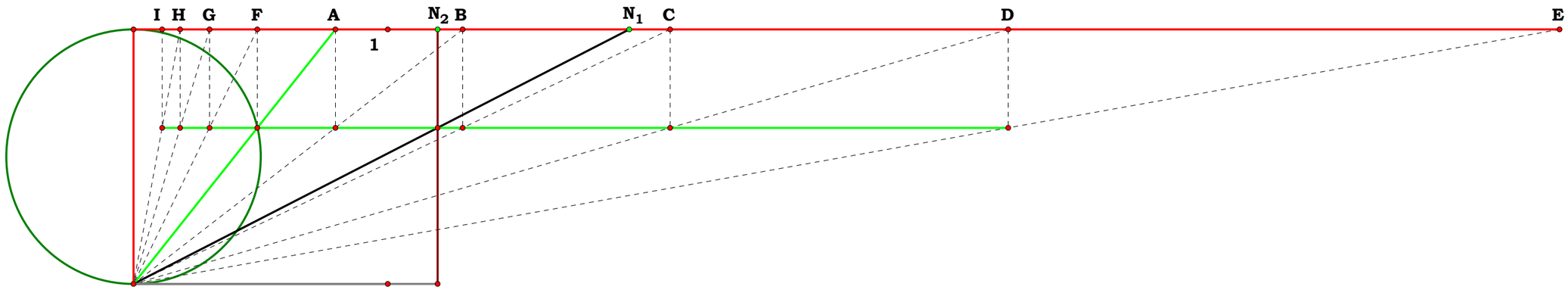
$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,-1}}{N_1^2} - F = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,-2}}{N_1^2} - G = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,-3}}{N_1^2} - H = 0.00000$

$(N_2 \cdot (N_1^2+1)) \cdot \frac{N_1^2+1^{\,-4}}{N_1^2} - I = 0.00000$

Topic divider



$$\frac{N_1}{N_2} = 1.63024$$

$$\sqrt{\frac{N_1-N_2}{N_2}} = 0.79388$$

$N_1 = 1.94939$

$N_2 = 1.19577$

$A = 0.79388$ $\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,0}}{N_2}$ $-A = 0.00000$

$B = 1.29421$ $\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,1}}{N_2}$ $-B = 0.00000$

$C = 2.10988$ $\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,2}}{N_2}$ $-C = 0.00000$

$D = 3.43962$ $\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,3}}{N_2}$ $-D = 0.00000$

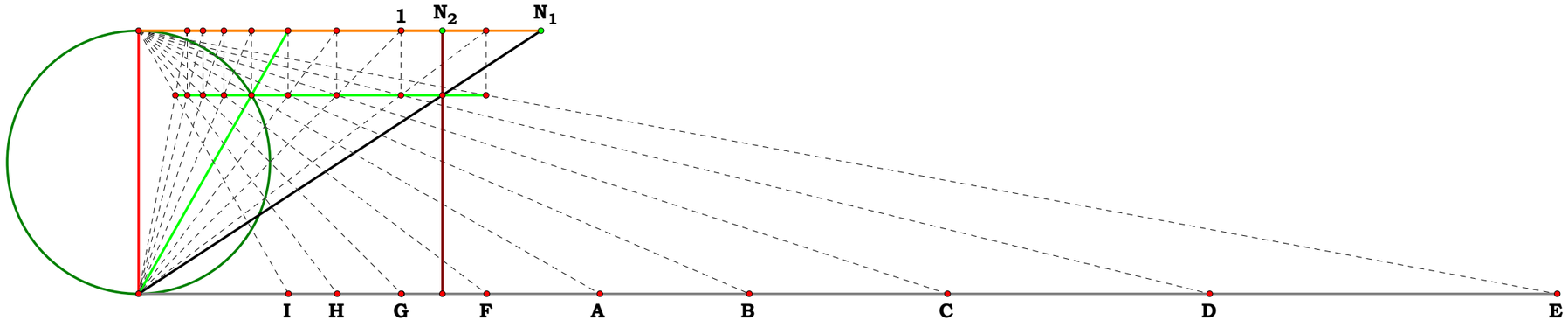
$E = 5.60741$ $\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,4}}{N_2}$ $-E = 0.00000$

$F = 0.48697$ $\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,-1}}{N_2}$ $-F = 0.00000$

$G = 0.29871$ $\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,-2}}{N_2}$ $-G = 0.00000$

$H = 0.18323$ $\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,-3}}{N_2}$ $-H = 0.00000$

$I = 0.11239$ $\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1^{\,-4}}{N_2}$ $-I = 0.00000$



$$\sqrt{\frac{N_2}{N_1-N_2}} = 1.75589$$

$$\frac{N_1}{N_2} = 1.32434$$

$N_1 = 1.53175$

$N_2 = 1.15661$

A = 1.75589
B = 2.32540
C = 3.07963
D = 4.07849
E = 5.40133

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{0} - A = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{1} - B = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{2} - C = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{3} - D = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{4} - E = 0.00000$$

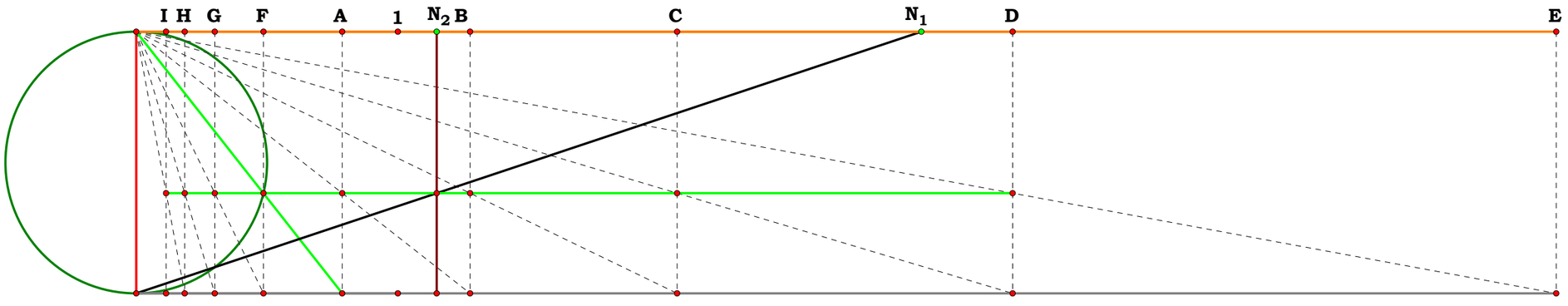
F = 1.32585
G = 1.00114
H = 0.75595
I = 0.57081

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{-1} - F = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{-2} - G = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{-3} - H = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}}\cdot\frac{N_1}{N_2}^{-4} - I = 0.00000$$



$$\sqrt{\frac{N_2}{N_1-N_2}} = 0.78754$$

$$\frac{N_1}{N_1-N_2} = 1.62022$$

$N_1 = 3.00000$

$N_2 = 1.14840$

$A = 0.78754$

$B = 1.27600$

$C = 2.06740$

$D = 3.34965$

$E = 5.42718$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{0} - A = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{1} - B = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{2} - C = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{3} - D = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{4} - E = 0.00000$$

$F = 0.48607$

$G = 0.30000$

$H = 0.18516$

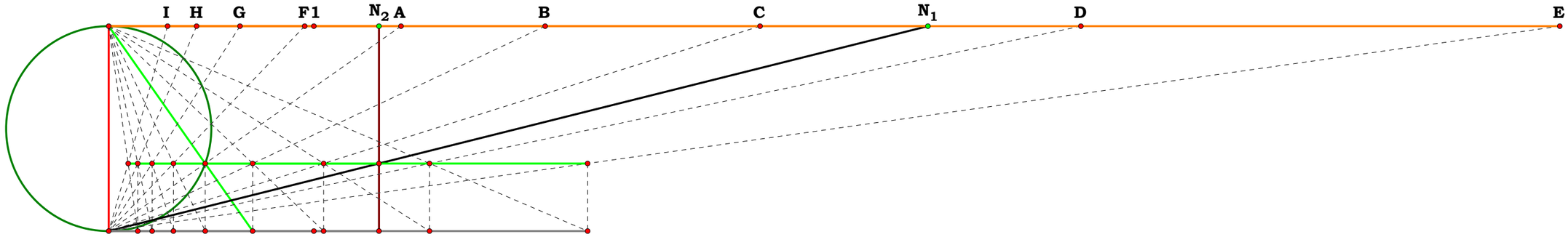
$I = 0.11428$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{-1} - F = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{-2} - G = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{-3} - H = 0.00000$$

$$\sqrt{\frac{N_2}{N_1-N_2}} \cdot \frac{N_1}{N_1-N_2}^{-4} - I = 0.00000$$



$$\sqrt{\frac{N_1-N_2}{N_2}} = 1.42482$$

$$\frac{N_1}{N_1-N_2} = 1.49258$$

$N_1 = 3.99177$

$N_2 = 1.31737$

$A = 1.42482$

$B = 2.12666$

$C = 3.17422$

$D = 4.73779$

$E = 7.07155$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{0} - A = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{1} - B = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{2} - C = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{3} - D = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{4} - E = 0.00000$$

$F = 0.95460$

$G = 0.63956$

$H = 0.42849$

$I = 0.28708$

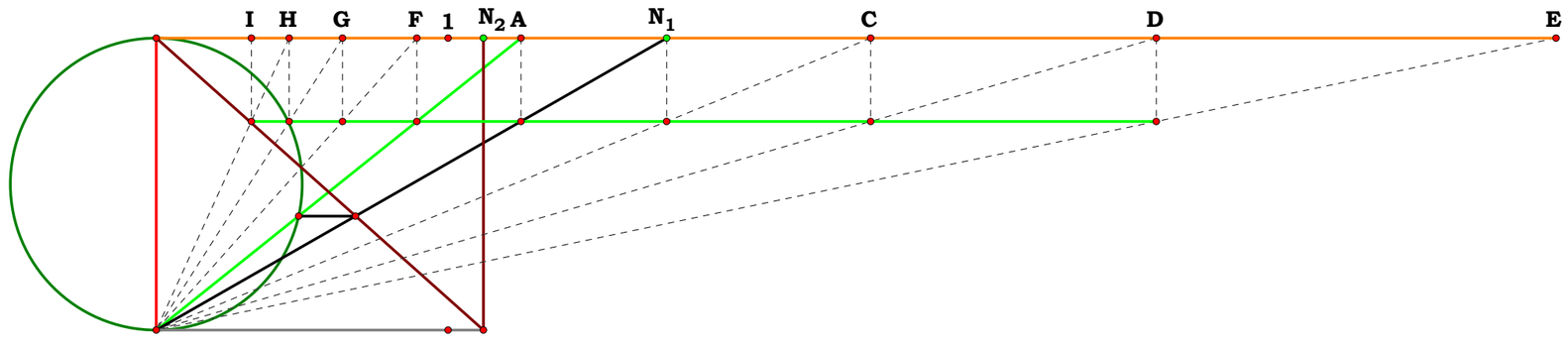
$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{-1} - F = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{-2} - G = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{-3} - H = 0.00000$$

$$\sqrt{\frac{N_1-N_2}{N_2}} \cdot \frac{N_1}{N_1-N_2}^{-4} - I = 0.00000$$

Topic Divider.



$$\sqrt{\frac{N_1}{N_2}} = 1.24930$$

$$\sqrt{N_1 \cdot N_2} = 1.39967$$

$$N_2 = 1.12036$$

$$A = 1.24930$$
$$N_1 = 1.74861$$
$$C = 2.44748$$
$$D = 3.42566$$
$$E = 4.79479$$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{0} - A = 0.00000$$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{1} - N_1 = 0.00000$$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{2} - C = 0.00000$$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{3} - D = 0.00000$$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{4} - E = 0.00000$$

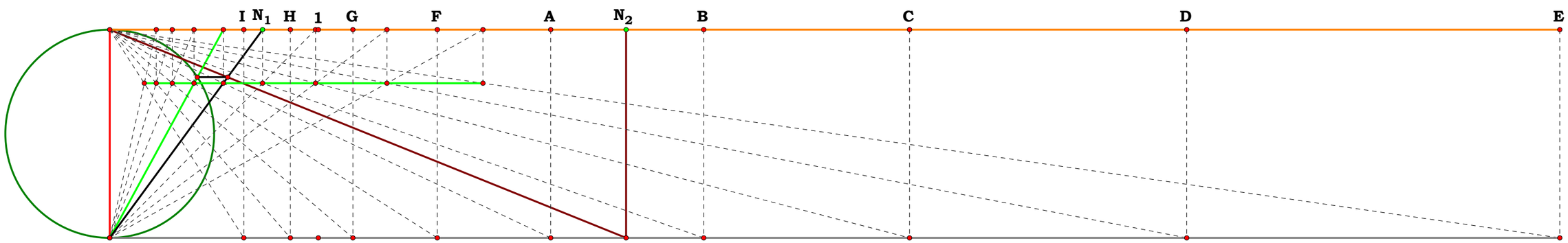
$$F = 0.89257$$
$$G = 0.63770$$
$$H = 0.45561$$
$$I = 0.32551$$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{-1} - F = 0.00000$$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{-2} - G = 0.00000$$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{-3} - H = 0.00000$$

$$\sqrt{\frac{N_1}{N_2}} \cdot \sqrt{N_1 \cdot N_2}^{-4} - I = 0.00000$$



$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} = 2.11403$$

$$\sqrt{N_1 \cdot N_2} = 1.34658$$

$N_1 = 0.73268$

$N_2 = 2.47486$

$A = 2.11403$

$B = 2.84670$

$C = 3.83331$

$D = 5.16185$

$E = 6.95084$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2}^{0} - A = 0.00000$$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2}^{1} - B = 0.00000$$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2}^{2} - C = 0.00000$$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2}^{3} - D = 0.00000$$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2}^{4} - E = 0.00000$$

$F = 1.56992$

$G = 1.16586$

$H = 0.86580$

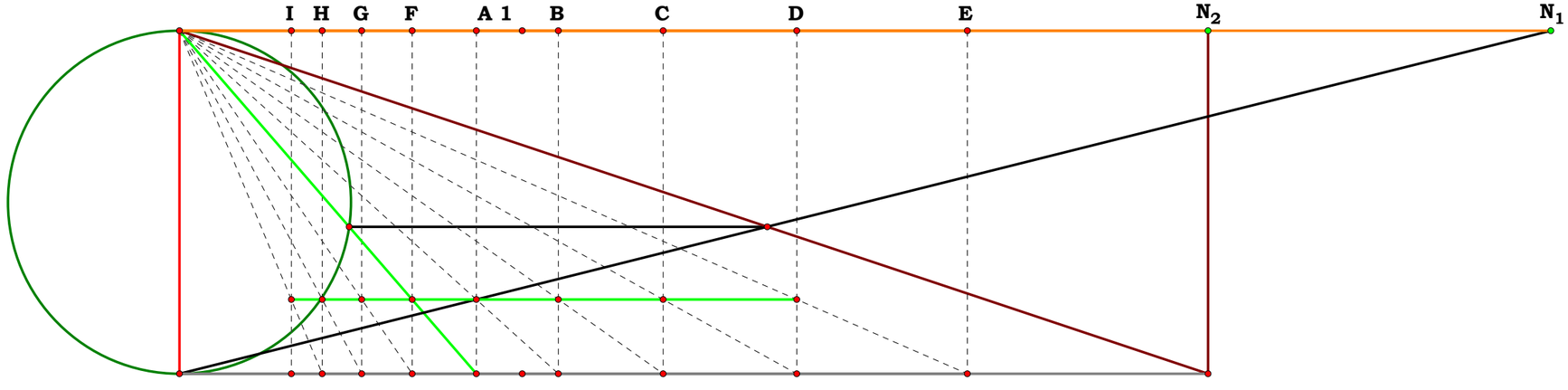
$I = 0.64296$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2}^{-1} - F = 0.00000$$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2}^{-2} - G = 0.00000$$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2}^{-3} - H = 0.00000$$

$$\frac{N_1}{\sqrt{N_1 \cdot N_2}-1} \cdot \sqrt{N_1 \cdot N_2}^{-4} - I = 0.00000$$



$$\sqrt{\frac{N_2}{N_1}} = 0.86603$$

$$\frac{B}{A} = 1.27633$$

$N_1 = 4.00000$

$N_2 = 3.00000$

$$\frac{N_2}{N_1} = 0.75000$$

$A = 0.86603$

$B = 1.10534$

$C = 1.41078$

$D = 1.80063$

$E = 2.29820$

$$\sqrt{\frac{N_2}{N_1}} - A = 0.00000$$

$$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B}{A} - B = 0.00000$$

$$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^2}{A} - C = 0.00000$$

$$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^3}{A} - D = 0.00000$$

$$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^4}{A} - E = 0.00000$$

$F = 0.67853$

$G = 0.53162$

$H = 0.41652$

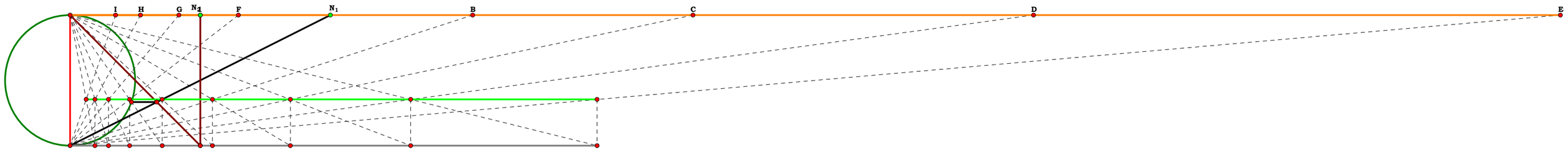
$I = 0.32634$

$$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^{-1}}{A} - F = 0.00000$$

$$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^{-2}}{A} - G = 0.00000$$

$$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^{-3}}{A} - H = 0.00000$$

$$\sqrt{\frac{N_2}{N_1}} \cdot \frac{B^{-4}}{A} - I = 0.00000$$



$\frac{C}{B} = 1.54692$

$\frac{D}{C} = 1.54692$

$\sqrt{2} = 1.41421$

$N_1 = 2.00000$

$N_2 = 1.00000$

B = 3.09384

C = 4.78591

D = 7.40341

E = 11.45247

F = 1.29289

G = 0.83579

H = 0.54029

I = 0.34927

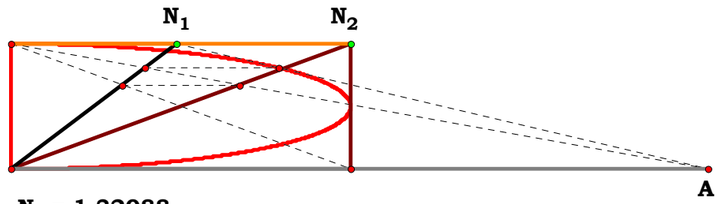
$AB := 1$

$N_1 := 3.31672$

$N_2 := 2.53931$

Although I wrote this up in The Curver of the Equation, let me do it again, from a different starting point, pointing out other relationships. Not to mention, simplified and that I will make N_1 the ellipse.

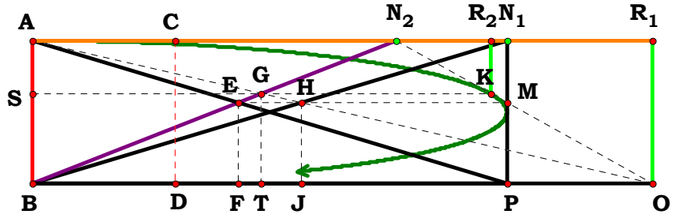
From any point N_1 draw the tangent to the ellipse N_2. Or given the square N_2 divide it by N_1.



$N_1 = 1.32088$

$N_2 = 2.71076$ $\quad \frac{N_2^2}{N_1} - A = 0.00000$

$A = 5.56312$



$N_1 = 3.31672$

$N_2 = 2.53931$

$R_1 = 4.33214$

$R_2 = 3.20184$

One can see that there is a number of pathways, starting from N_1 by which to construct the figure and it is independent of any second variable. For example, I can use the operational tail of N_1 and take any point H on it. From H, I can go to either M or E. Or I can take N_1 and any N_2 and find everything, which is what I will be doing here. Each path one takes will, naturally, produce a both a logical and an analogical path to the same conclusion.

$$BF := \frac{N_1 \cdot N_2}{N_1 + N_2} \quad EF := \frac{BF}{N_2} \quad BJ := N_1 \cdot EF \quad BO := \frac{BJ}{1 - EF} \quad R_1 := BO$$

$$BT := \frac{BO \cdot N_2}{BO + N_2} \quad GT := \frac{BT}{N_2} \quad GK := BO \cdot (1 - GT) \quad SK := GK + BT \quad R_2 := SK$$

$R_1 = 4.332134$ $\quad R_2 = 3.20184$

$$R_1 - \frac{N_1^2}{N_2} = 0 \qquad R_2 - \frac{2 \cdot N_1^2 \cdot N_2}{N_1^2 + N_2^2} = 0$$

Therefore, even though, given only the two points, the logic gives us a means of drawing the figure for the solution.

Now, if given N_2 and R_2 what would N_1 be? Given just 2 points, or any two values, it would not be possible, however, since we have the equation, we can now draw it to find the figure.

$$N_1 - \frac{N_2 \cdot \sqrt{R_2 \cdot (2 \cdot N_2 - R_2)}}{2 \cdot N_2 - R_2} = 0$$

$N_1 = 3.59613$

$N_2 = 2.51727$

$2 \cdot N_2 = 5.03454$ $\quad B = 5.03454$

$(2 \cdot N_2) - N_1 = 1.43841$ $\quad C = 1.43841$

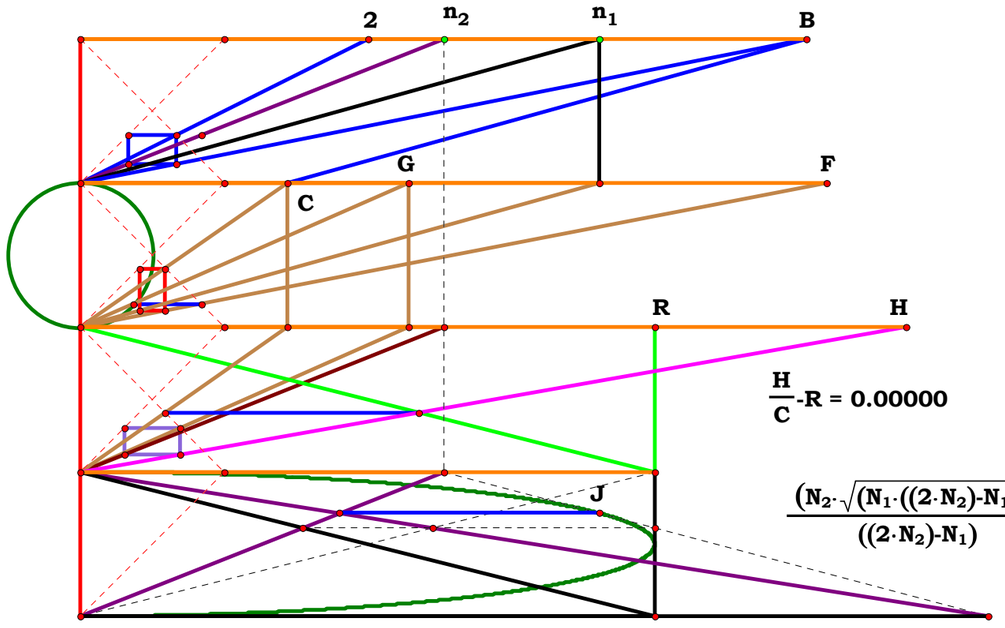
$N_1 \cdot ((2 \cdot N_2) - N_1) = 5.17272$ $\quad F = 5.17272$

$\sqrt{(N_1 \cdot ((2 \cdot N_2) - N_1))} = 2.27436$ $\quad G = 2.27436$

$N_2 \cdot \sqrt{(N_1 \cdot ((2 \cdot N_2) - N_1))} = 5.72519$ $\quad H = 5.72519$

$\frac{N_2 \cdot \sqrt{N_1 \cdot (2 \cdot N_2 - N_1)}}{2 \cdot N_2 - N_1} = 3.98021$ $\quad R = 3.98021$

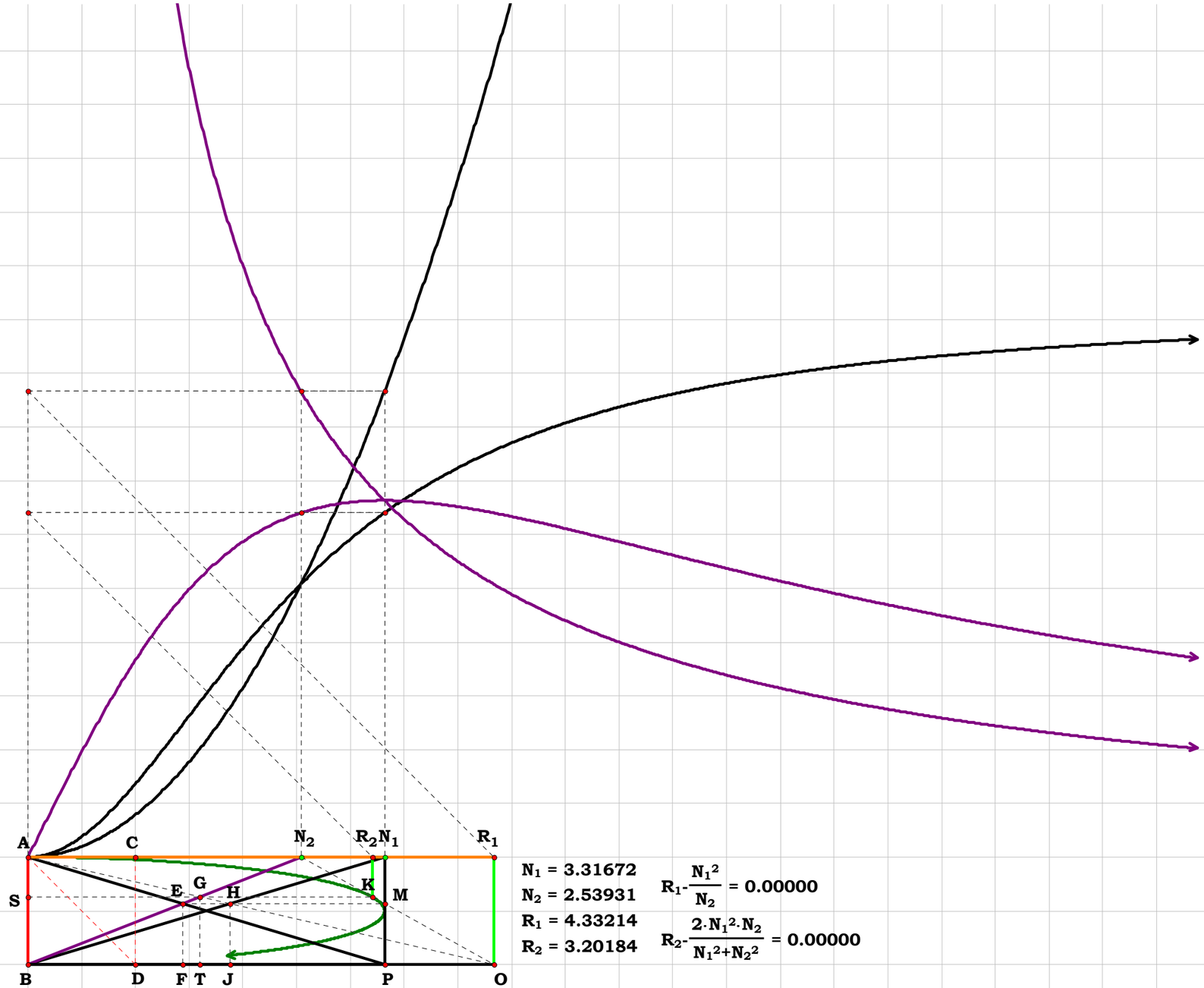
$J - N_1 = 0.00000$ $\quad J = 3.59613$



$\frac{H}{C} - R = 0.00000$

$\frac{(N_2 \cdot \sqrt{(N_1 \cdot ((2 \cdot N_2) - N_1))})}{((2 \cdot N_2) - N_1)} - R = 0.00000$

Therefore, any point, on any circle or ellipse, may be espressed as a ratio between the two dimensions of a plane.
Both an ellipse and a circle are two-dimensional linear functions, one can say that it is the loci of such and such points; in either case, it is not *a line.* Every segment is of one-dimension, or linear.



$N_1 = 3.31672$

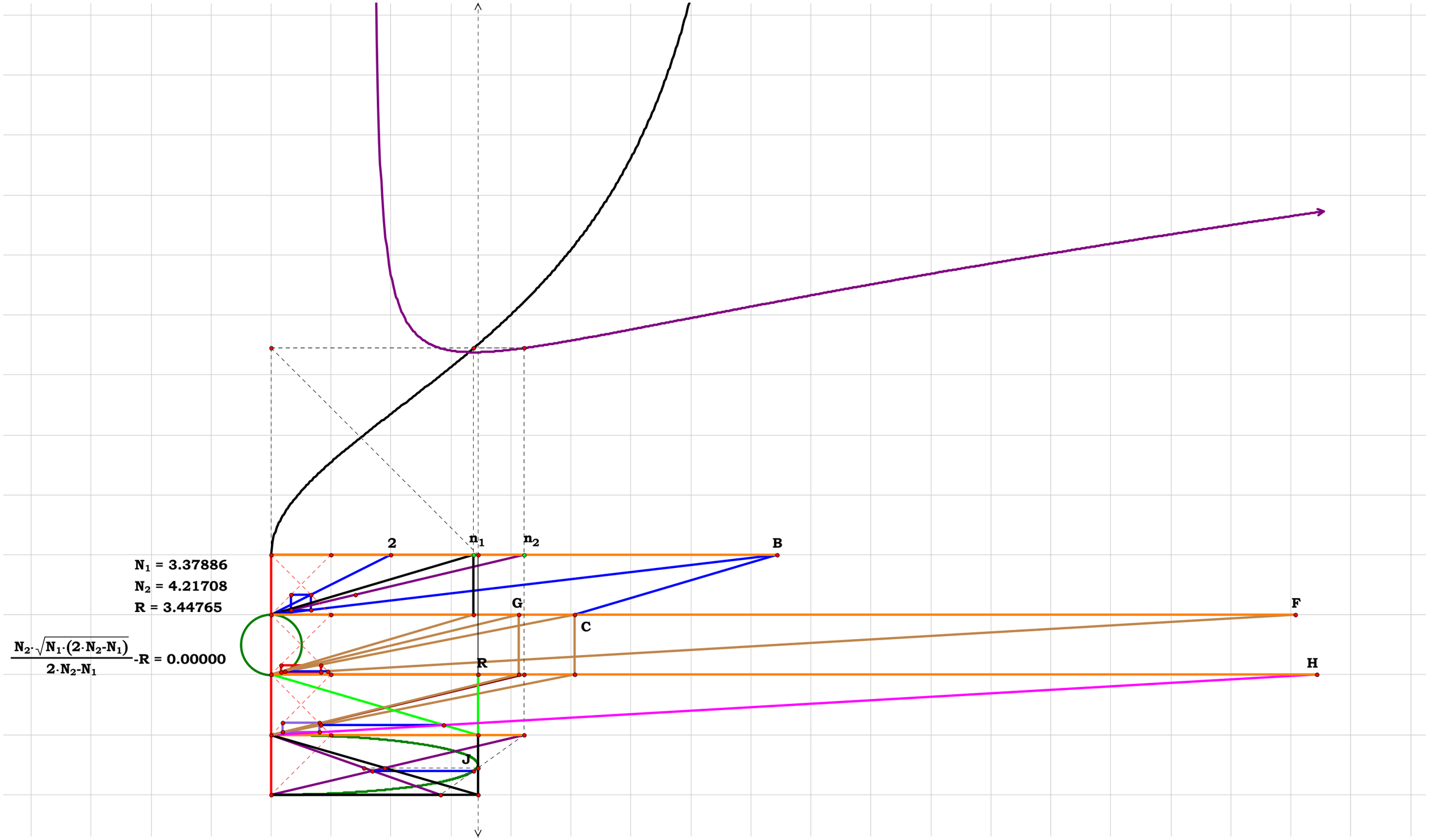
$N_2 = 2.53931$

$R_1 = 4.33214$

$R_2 = 3.20184$

$R_1 - \frac{N_1^2}{N_2} = 0.00000$

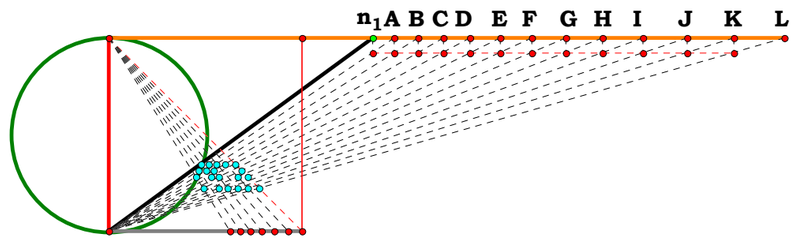
$R_2 - \frac{2 \cdot N_1^2 \cdot N_2}{N_1^2 + N_2^2} = 0.00000$


2
n1
n2
B
G
F
C
R
H
J
N1 = 3.37886
N2 = 4.21708
R = 3.44765
N2·√(N1·(2·N2-N1)) / (2·N2-N1) -R = 0.00000

Simple Geometric Series.

During my randome excursion into textbooks, I came across a statement by one author that exponential notation was not demonstrable, or abstractable from geometry. However, when I read that statement I reached a different conclusion, that the author could not draw his way out of a paper bag. It really does not take that much playing with basic geometric tools to discover a wealth of figures by which to develop geometric series. I will start with a simple root figure and add a bit of recursion. One will note that they can do a figure demonstrating both so called positive exponential series and negative with the same figure, or in short, the whole of basic exponential notation.

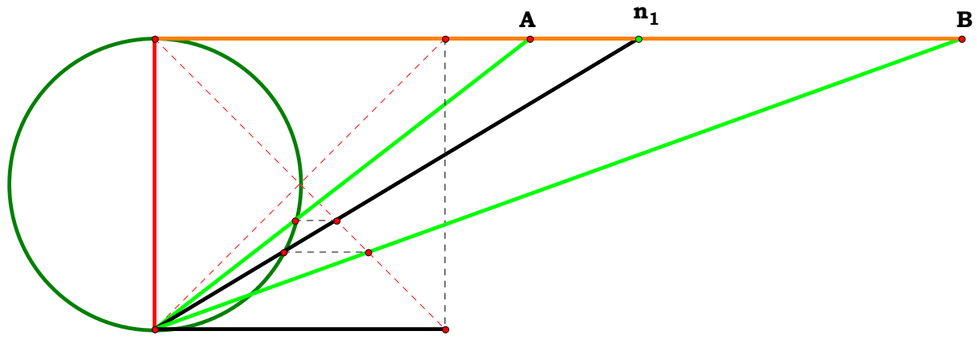
$N_1 = 1.36693$



A = 1.47803	$N_1^{1.25}$-A = 0.00000
B = 1.59816	$N_1^{1.5}$-B = 0.00000
C = 1.72805	$N_1^{1.75}$-C = 0.00000
D = 1.86850	N_1^{2}-D = 0.00000
E = 2.02036	$N_1^{2.25}$-E = 0.00000
F = 2.18457	$N_1^{2.5}$-F = 0.00000
G = 2.36212	$N_1^{2.75}$-G = 0.00000
H = 2.55410	N_1^{3}-H = 0.00000
I = 2.76169	$N_1^{3.25}$-I = 0.00000
J = 2.98615	$N_1^{3.5}$-J = 0.00000
K = 3.22885	$N_1^{3.75}$-K = 0.00000
L = 3.49128	N_1^{4}-L = 0.00000

$N_1 = 1.66534$

A = 1.29048	$\sqrt{N_1} = 1.29048$	$\sqrt{N_1}$-A = 0.00000
B = 2.77337	$N_1^{2} = 2.77337$	N_1^{2}-B = 0.00000



One can see that one of the operational tails can produce two results using the operational tail of the unit and the units circular function or circle for short.

The basic figure, where the circle is added to the unit example, can be understood as the pair of the unit and the primary unit function traditionally called a circle. Or, again, one can view the circle as the operational tail of the primitive linear function.

Each of the results also have the same option for development, thus one can, using the area of the operational tails, simply draw to their hearts content simple geometric series. And, if we make the unit a veriable or second input, one can start to complicate things. Then by tossing a function on the second, well one can generate all the head work they want. One can see, by the dual splitting of our options, why the results is a factor of 2. This may be a hint as to how to formulate series using a function on the unit and after the first split, switching to the unit for further recursions, or whatever one likes.

$AB := 1$

$N_1 := 1.67837$

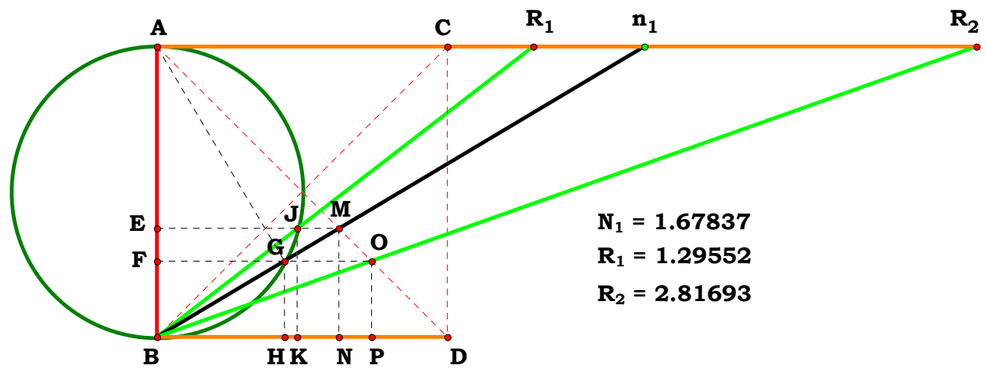
$MN := \frac{1}{N_1 + 1}$ $\quad EJ := \sqrt{MN \cdot (1 - MN)}$

$R_1 := \frac{EJ}{MN}$ $\quad R_1 - \sqrt{N_1} = 0$

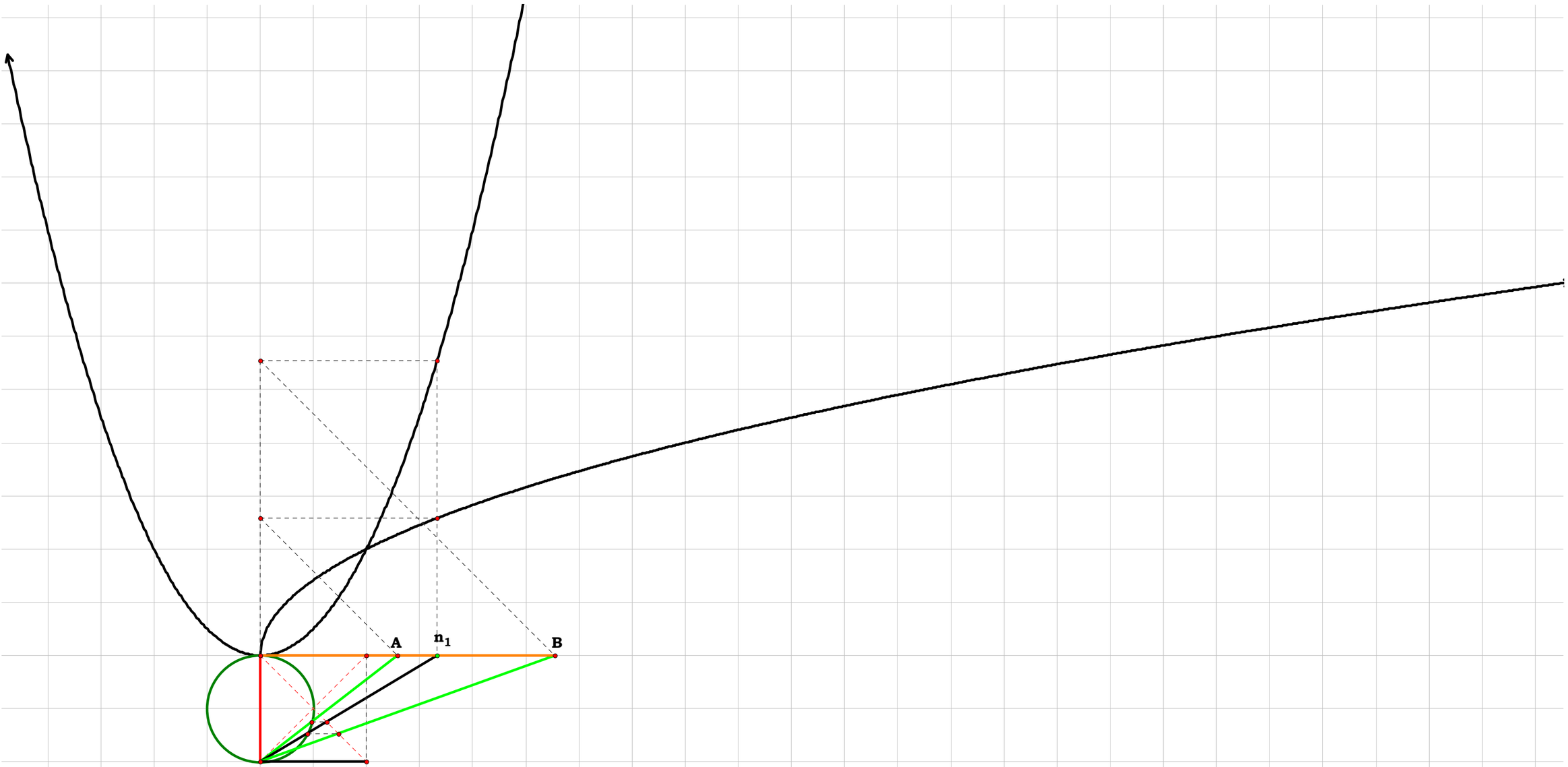
$BN_1 := \sqrt{AB^2 + N_1^2}$ $\quad BG := \frac{AB^2}{BN_1}$

$FG := \frac{N_1 \cdot BG}{BN_1}$ $\quad GH := \frac{FG}{N_1}$

$R_2 := \frac{1 - GH}{GH}$ $\quad N_1^2 - R_2 = 0$



Thus, one should realize, as soon as one is given the circle, they are given a linear function which automatically implies the importation of the so called Pythagorean Theorem. Thus, the so called theorem is just one results of what was given as soon as one had taken the original function. The fact of the matter is, one need not even mention it as it is one of a group of results. And, as one is given the circle, what is implied is, when one realize that the unit tail in the figure can be used to extrapolate a second variable, that the ellipse is a given also, or again, a geometric tool is that tool which produces one, and only one, difference between two points, or again, one in which is covered by the concept of complete induction of the unit. The whole train of thought which leads to discovering what a circle is, is not possible when one is thinking arithmetically, thought has to evolve to become inclusive of proportional reasoning which brings in multiplication and division, or again, the root functions. Proportion is a given as soon as one starts using the circle or the primitive unit function.



N_1 = 1.66534

A = 1.29048 $\sqrt{N_1}$ = 1.29048 $\sqrt{N_1}$-A = 0.00000

B = 2.77337 N_1^2 = 2.77337 N_1^2-B = 0.00000

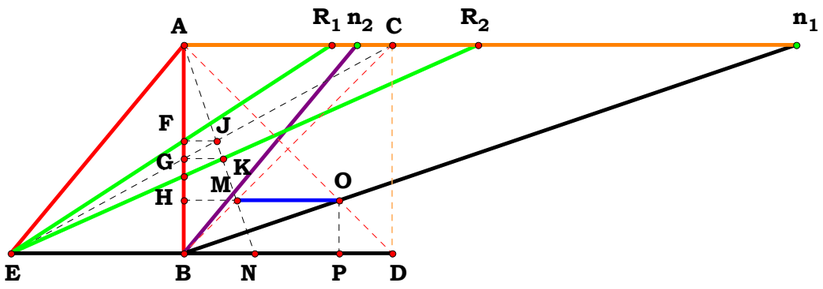
$AB := 1$

$N_1 := 2.93308$

$N_2 := .82839$

Sketch from 062412

One will notice that this is a geometric series which uses a second variable to deterine the point from which to project the series from. One may also notice, the vanishing point for the series, as shown in the second figure remains at 0 no matter what value one sets for either variable. One can manually adjust the second veriable in order to produce any number of proportionals within a given distance which means that a controlling structure to do exponential series can be plugged into the figure, if one knew what that plugin is.



$N_1 = 2.93308$
$N_2 = 0.82839$
$R_1 = 0.70843$
$R_2 = 1.41157$

$BP := \frac{N_1}{N_1 + 1}$ $AH := BP$ $HM := 1 - AH$ $BN := \frac{HM}{AH}$

$BE := N_2$ $BG := \frac{N_2}{N_2 + 1}$ $AG := 1 - BG$ $GK := BN \cdot AG$

$R_2 := \frac{BE + GK}{BG} - N_2$ $R_2 = 1.411568$ $R_2 - \frac{N_1 \cdot N_2 + 1}{N_1 \cdot N_2} = 0$

$BF := \frac{N_2 + BN}{N_2 + 1 + BN}$ $R_1 := \frac{BE}{BF} - N_2$ $R_1 = 0.708432$

$R_1 - \frac{N_1 \cdot N_2}{N_1 \cdot N_2 + 1} = 0$ $R_1 - R_2^{-1} = 0$

$A^2\text{-}B = 0.00000$
$(A\cdot B)\text{-}C = 0.00000$
$B^2\text{-}D = 0.00000$
$(B\cdot C)\text{-}E = 0.00000$

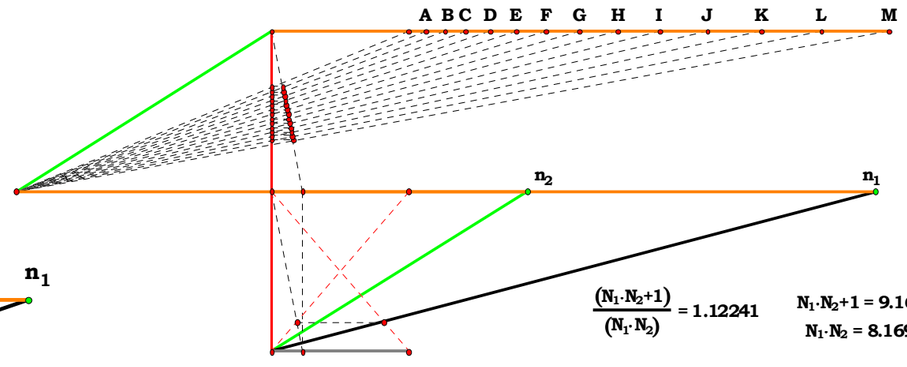
$C^2\text{-}F = 0.00000$
$(C\cdot D)\text{-}G = 0.00000$
$D^2\text{-}H = 0.00000$
$(D\cdot E)\text{-}I = 0.00000$

$E^2\text{-}J = 0.00000$
$(E\cdot F)\text{-}K = 0.00000$
$F^2\text{-}L = 0.00000$
$(F\cdot G)\text{-}M = 0.00000$

$\frac{N_1 \cdot N_2 + 1^{\,1}}{N_1 \cdot N_2}\text{-}A = 0.00000$
$\frac{(N_1 \cdot N_2 + 1)^2}{(N_1 \cdot N_2)}\text{-}B = 0.00000$
$\frac{(N_1 \cdot N_2 + 1)^3}{(N_1 \cdot N_2)}\text{-}C = 0.00000$
$\frac{(N_1 \cdot N_2 + 1)^4}{(N_1 \cdot N_2)}\text{-}D = 0.00000$

$\frac{(N_1 \cdot N_2 + 1)^5}{(N_1 \cdot N_2)}\text{-}E = 0.00000$
$\frac{(N_1 \cdot N_2 + 1)^6}{(N_1 \cdot N_2)}\text{-}F = 0.00000$
$\frac{(N_1 \cdot N_2 + 1)^7}{(N_1 \cdot N_2)}\text{-}G = 0.00000$
$\frac{(N_1 \cdot N_2 + 1)^8}{(N_1 \cdot N_2)}\text{-}H = 0.00000$

$\frac{(N_1 \cdot N_2 + 1)^9}{(N_1 \cdot N_2)}\text{-}I = 0.00000$
$\frac{(N_1 \cdot N_2 + 1)^{10}}{(N_1 \cdot N_2)}\text{-}J = 0.00000$
$\frac{(N_1 \cdot N_2 + 1)^{11}}{(N_1 \cdot N_2)}\text{-}K = 0.00000$
$\frac{(N_1 \cdot N_2 + 1)^{12}}{(N_1 \cdot N_2)}\text{-}L = 0.00000$
$\frac{(N_1 \cdot N_2 + 1)^{13}}{(N_1 \cdot N_2)}\text{-}M = 0.00000$



$\frac{(N_1 \cdot N_2 + 1)}{(N_1 \cdot N_2)} = 1.12241$

$N_1 \cdot N_2 + 1 = 9.16907$
$N_1 \cdot N_2 = 8.16907$

$A^3\text{-}C = 0.00000$
$B^3\text{-}F = 0.00000$
$C^3\text{-}I = 0.00000$
$D^3\text{-}L = 0.00000$

$N_1 = 4.39883$
$N_2 = 1.85710$

$A = 1.12241$
$B = 1.25981$
$C = 1.41403$
$D = 1.58712$
$E = 1.78141$

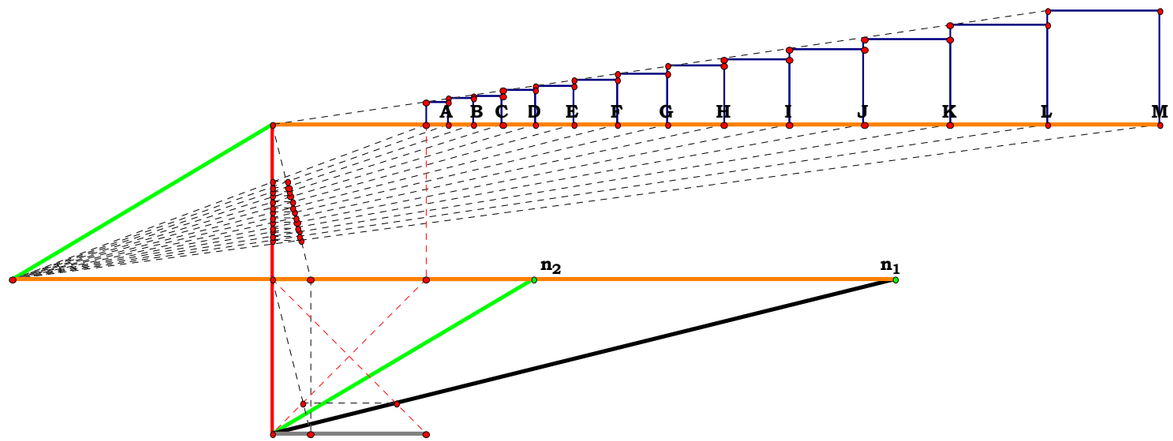
$F = 1.99947$
$G = 2.24424$
$H = 2.51896$
$I = 2.82731$

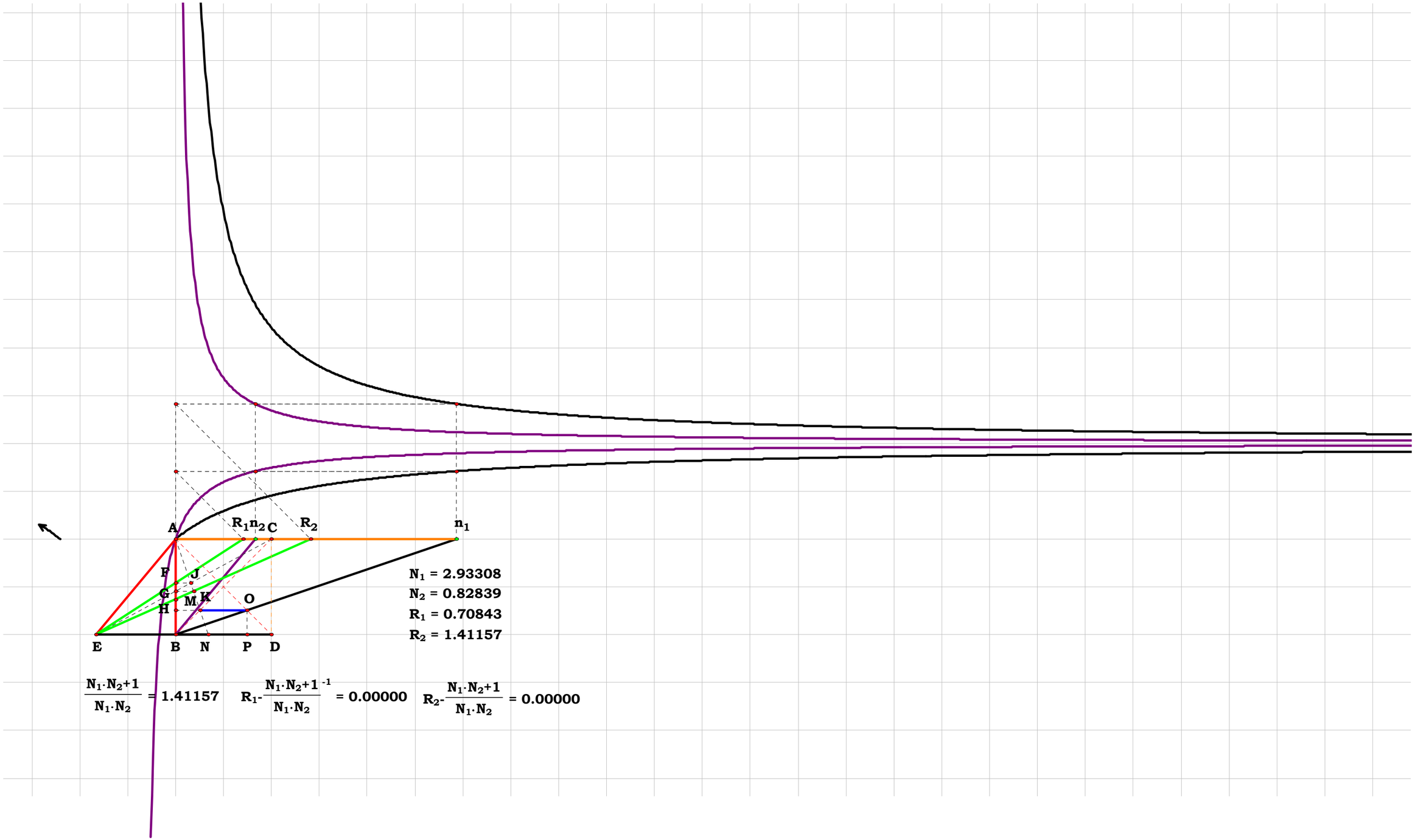
$J = 3.17341$
$K = 3.56188$
$L = 3.99790$
$M = 4.48729$

$A^2 = 1.25981$
$A\cdot B = 1.41403$
$B^2 = 1.58712$
$B\cdot C = 1.78141$

$C^2 = 1.99947$
$C\cdot D = 2.24424$
$D^2 = 2.51896$
$D\cdot E = 2.82731$

$E^2 = 3.17341$
$E\cdot F = 3.56188$
$F^2 = 3.99790$
$F\cdot G = 4.48729$





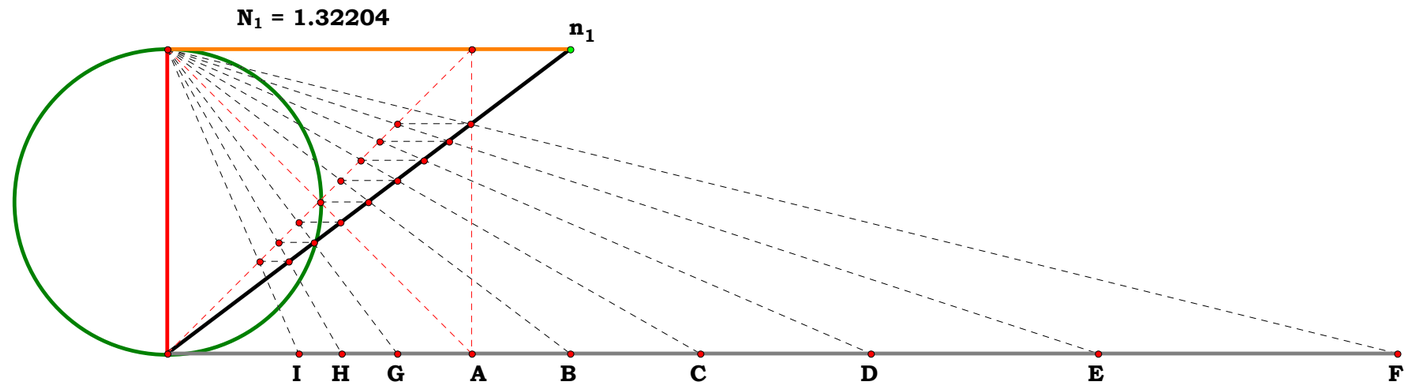
$\frac{N_1 \cdot N_2 + 1}{N_1 \cdot N_2} = 1.41157$ $R_1 - \frac{N_1 \cdot N_2 + 1}{N_1 \cdot N_2}^{-1} = 0.00000$ $R_2 - \frac{N_1 \cdot N_2 + 1}{N_1 \cdot N_2} = 0.00000$

072211-1

Just another easily constructable exponential series. However, one can add this plate to the previous one using each point on this as the second variable in that plate.

A = 1.00000
B = 1.32204
C = 1.74778
D = 2.31062
E = 3.05473
F = 4.03846
G = 0.75641
H = 0.57216
I = 0.43278

N_1^0-A = 0.00000
N_1^1-B = 0.00000
N_1^2-C = 0.00000
N_1^3-D = 0.00000
N_1^4-E = 0.00000
N_1^5-F = 0.00000
N_1^{-1}-G = 0.00000
N_1^{-2}-H = 0.00000
N_1^{-3}-I = 0.00000



$AB := 1$

$N_1 := 1.72698$

$KM := \frac{1}{N_1 + 1}$ $BM := \frac{N_1}{N_1 + 1}$

$R_1 := \frac{KM}{BM}$ $R_1 = 0.579046$

$R_1 - \frac{1}{N_1} = 0$ $R_1 - N_1^{-1} = 0$

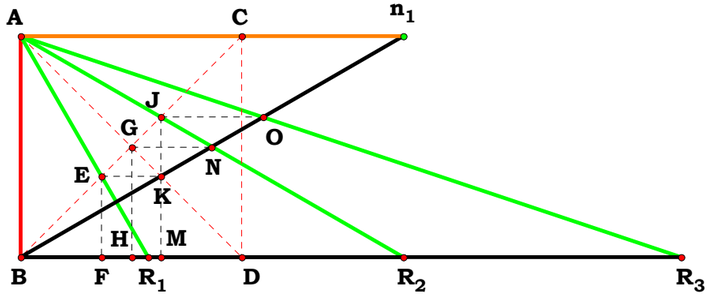
$BD := AB$ $BD - N_1^0 = 0$ $GH := \frac{AB}{2}$

$R_2 := \frac{N_1 \cdot GH}{GH}$ $R_2 - N_1 = 0$ $R_2 - N_1^1 = 0$

$JM := BM$ $R_3 := \frac{N_1 \cdot JM}{KM}$ $R_3 = 2.98246$

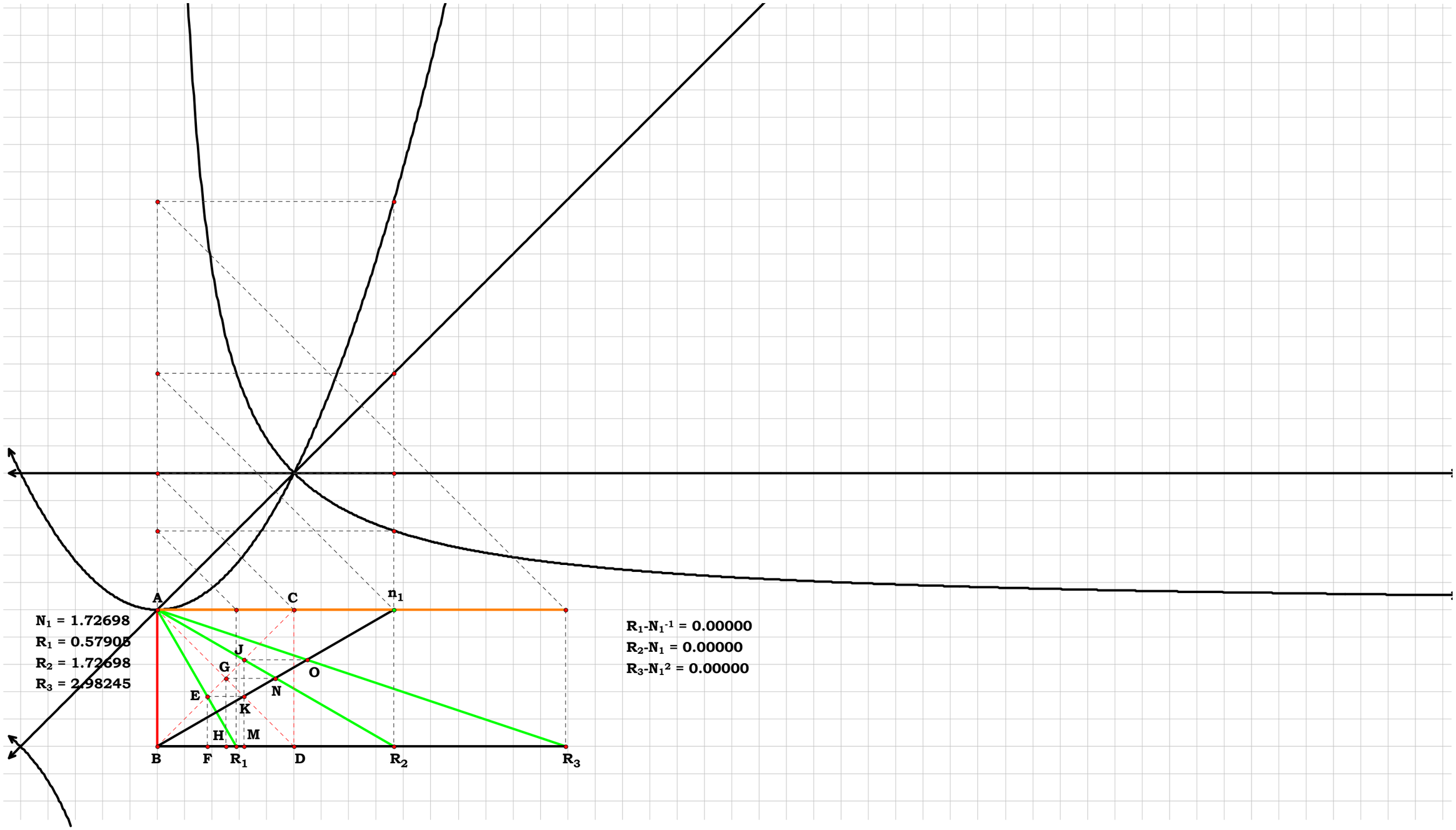
$R_3 - N_1^2 = 0$

N_1 = 1.72698
R_1 = 0.57905
R_2 = 1.72698
R_3 = 2.98245



One might notice, no matter where N_1 is, AR_1 will always be perpendicular to BN_1, or again, their intersection will always be on the circomference of a circle.

And thus we have four values in a geometric series. One may note, that if I was constructing, which I did for the temple, an arithmetic series, I would use AB, instead of AC to walk the series.


A
C
n1
J
G
O
N
E
K
H
M
B
F
R1
D
R2
R3
N1 = 1.72698
R1 = 0.57905
R2 = 1.72698
R3 = 2.98245
R1-N1-1 = 0.00000
R2-N1 = 0.00000
R3-N12 = 0.00000

072211-2

$AB := 1$

$N_1 := 2.13284$

$N_2 := 3.17169$

$AF := \frac{AB}{2}$

$BM := N_1 \cdot AF$ $\quad BT := N_2 \cdot AF$

$R_2 := \frac{BM}{AF}$ $\quad R_3 := \frac{BT}{AF}$

$R_2 = 2.13284$ $\quad R_3 = 3.17169$

$HJ := \frac{R_2}{N_2 + R_2}$ $\quad BJ := N_1 \cdot HJ$

$R_1 := \frac{BJ}{AB - HJ}$ $\quad NP := \frac{R_3}{R_3 + N_1}$

$BV := N_2 \cdot NP$ $\quad R_4 := \frac{BV}{AB - NP}$

$R_1 = 1.434253$ $\quad R_4 = 4.716536$

$A = 2.05202$ $\quad \frac{N_2^0}{N_1^{-1}} = 2.05202$

$B = 2.56000$ $\quad \frac{N_2^1}{N_1^0} = 2.56000$

$C = 3.19372$ $\quad \frac{N_2^2}{N_1^1} = 3.19372$

$D = 3.98432$ $\quad \frac{N_2^3}{N_1^2} = 3.98432$

$E = 4.97062$ $\quad \frac{N_2^4}{N_1^3} = 4.97062$

$F = 1.64485$ $\quad \frac{N_2^{-1}}{N_1^{-2}} = 1.64485$

$G = 1.31846$ $\quad \frac{N_2^{-2}}{N_1^{-3}} = 1.31846$

$H = 1.05685$ $\quad \frac{N_2^{-3}}{N_1^{-4}} = 1.05685$

$I = 0.84714$ $\quad \frac{N_2^{-4}}{N_1^{-5}} = 0.84714$

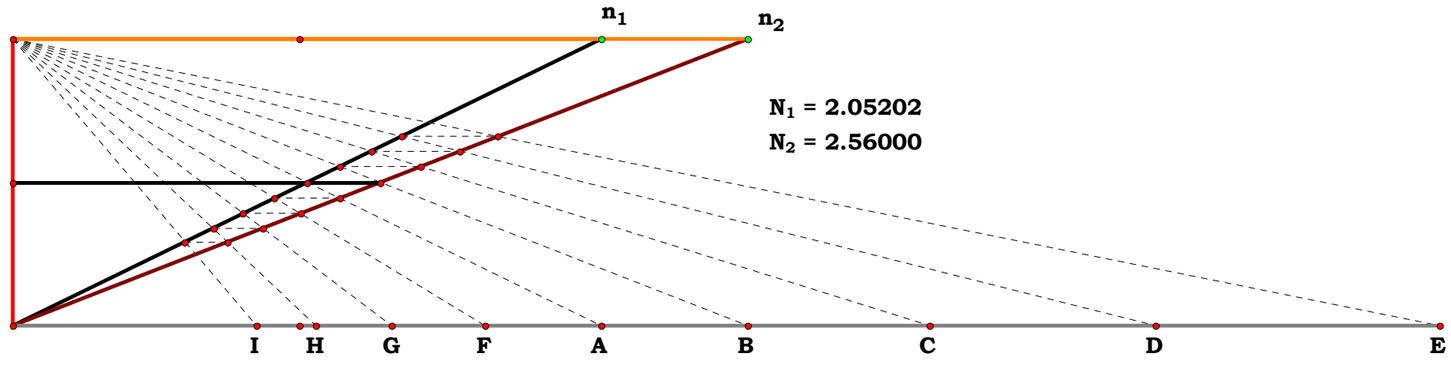
$A\text{-}\frac{N_2^0}{N_1^{-1}} = 0.00000$ $\quad F\text{-}\frac{N_2^{-1}}{N_1^{-2}} = 0.00000$

$B\text{-}\frac{N_2^1}{N_1^0} = 0.00000$ $\quad G\text{-}\frac{N_2^{-2}}{N_1^{-3}} = 0.00000$

$C\text{-}\frac{N_2^2}{N_1^1} = 0.00000$ $\quad H\text{-}\frac{N_2^{-3}}{N_1^{-4}} = 0.00000$

$D\text{-}\frac{N_2^3}{N_1^2} = 0.00000$ $\quad I\text{-}\frac{N_2^{-4}}{N_1^{-5}} = 0.00000$

$E\text{-}\frac{N_2^4}{N_1^3} = 0.00000$



$N_1 = 2.13284$

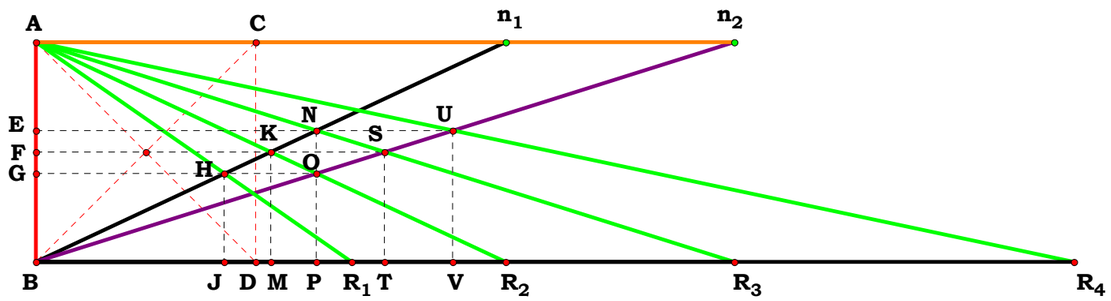
$N_2 = 3.17169$

$R_1 = 1.43425$

$R_2 = 2.13284$

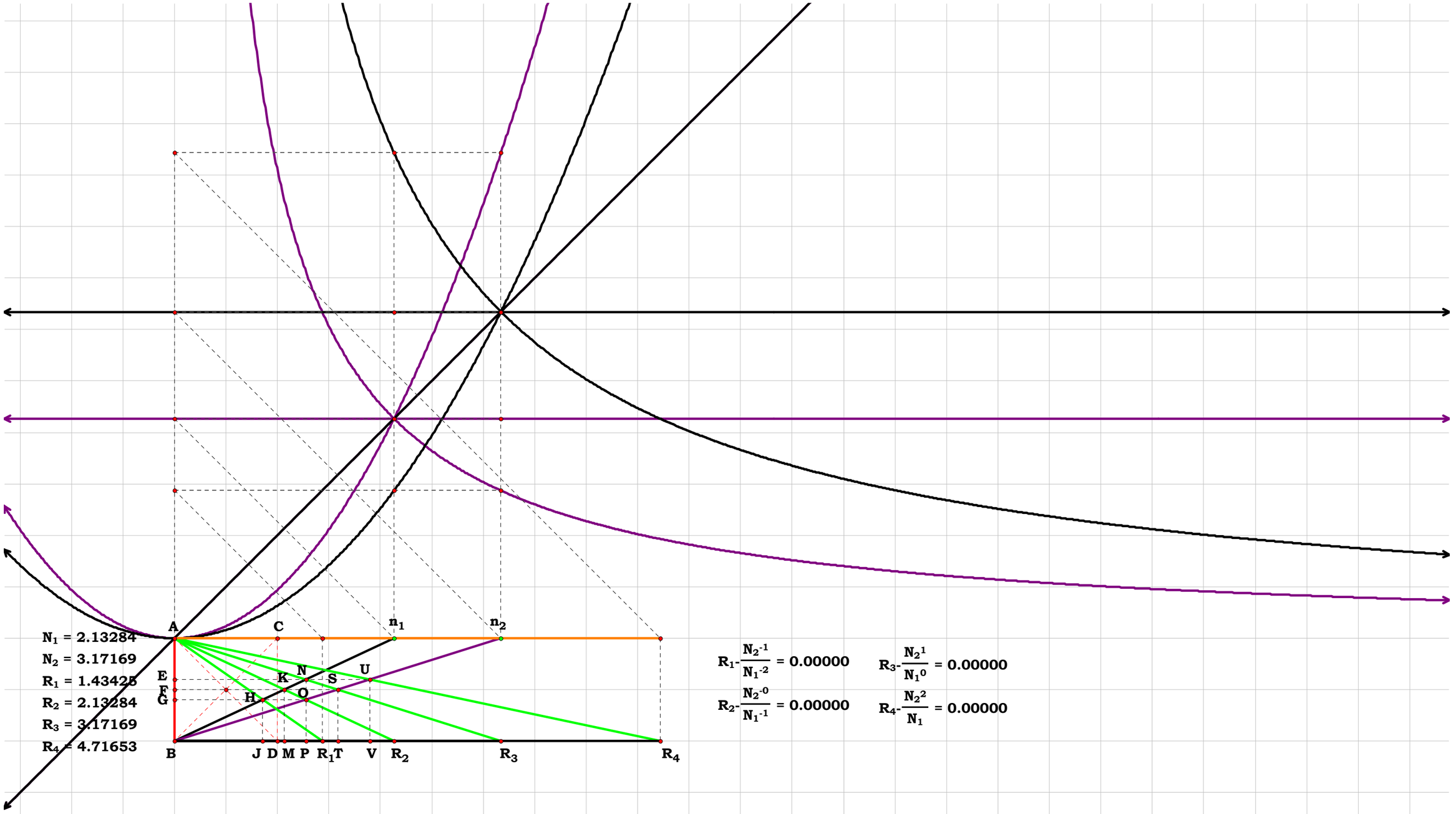
$R_3 = 3.17169$

$R_4 = 4.71653$



$R_1 - \frac{N_1^2}{N_2} = 0$ $\quad R_2 - N_1 = 0$ $\quad R_3 - N_2 = 0$ $\quad R_4 - \frac{N_2^2}{N_1} = 0$

$R_1 - \frac{N_2^{-1}}{N_1^{-2}} = 0$ $\quad R_2 - \frac{N_2^{-0}}{N_1^{-1}} = 0$ $\quad R_3 - \frac{N_2^1}{N_1^0} = 0$ $\quad R_4 - \frac{N_2^2}{N_1} = 0$



$N_1 = 2.13284$
$N_2 = 3.17169$
$R_1 = 1.43425$
$R_2 = 2.13284$
$R_3 = 3.17169$
$R_4 = 4.71653$

$R_1 - \frac{N_2^{-1}}{N_1^{-2}} = 0.00000$

$R_2 - \frac{N_2^{-0}}{N_1^{-1}} = 0.00000$

$R_3 - \frac{N_2^{1}}{N_1^{0}} = 0.00000$

$R_4 - \frac{N_2^{2}}{N_1} = 0.00000$

080912

$AB := 1$

$N_1 := 3.46347$

$N_2 := 2.62874$

$$AE := \frac{AB}{N_2 + AB} \qquad BN := AE \cdot N_1$$

$$A_1 := \frac{BN}{1 - AE} \qquad AF := \frac{A_1}{A_1 + N_2}$$

$$BT := AF \cdot N_1 \qquad B_1 := \frac{BT}{1 - AF}$$

$$AG := \frac{B_1}{B_1 + N_2} \qquad BX := AG \cdot N_1$$

$$C_1 := \frac{BX}{1 - AG} \qquad AH := \frac{C_1}{C_1 + N_2}$$

$$BZ := AH \cdot N_1 \qquad D_1 := \frac{BZ}{1 - AH}$$

$A = 1.43109$

$B = 2.04801$

$C = 2.93088$

$D = 4.19435$

$E = 6.00248$

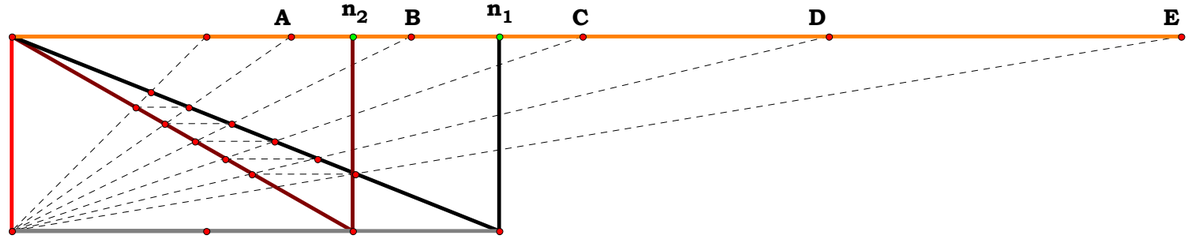
$\frac{N_1}{N_2} - A = 0.00000$

$\frac{N_1^{\,2}}{N_2} - B = 0.00000$

$\frac{N_1^{\,3}}{N_2} - C = 0.00000$

$\frac{N_1^{\,4}}{N_2} - D = 0.00000$

$\frac{N_1^{\,5}}{N_2} - E = 0.00000$



$N_1 = 3.46347$

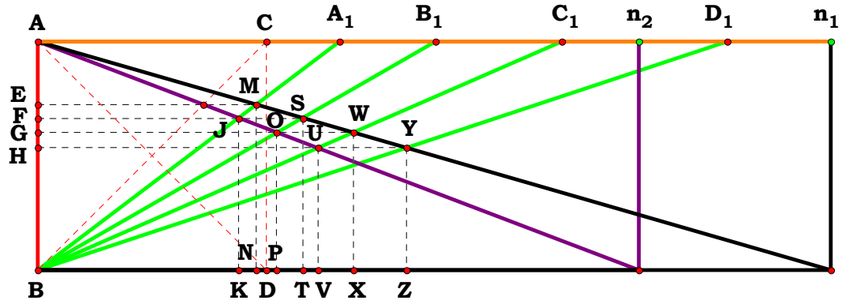
$N_2 = 2.62874$

$A_1 = 1.31754$

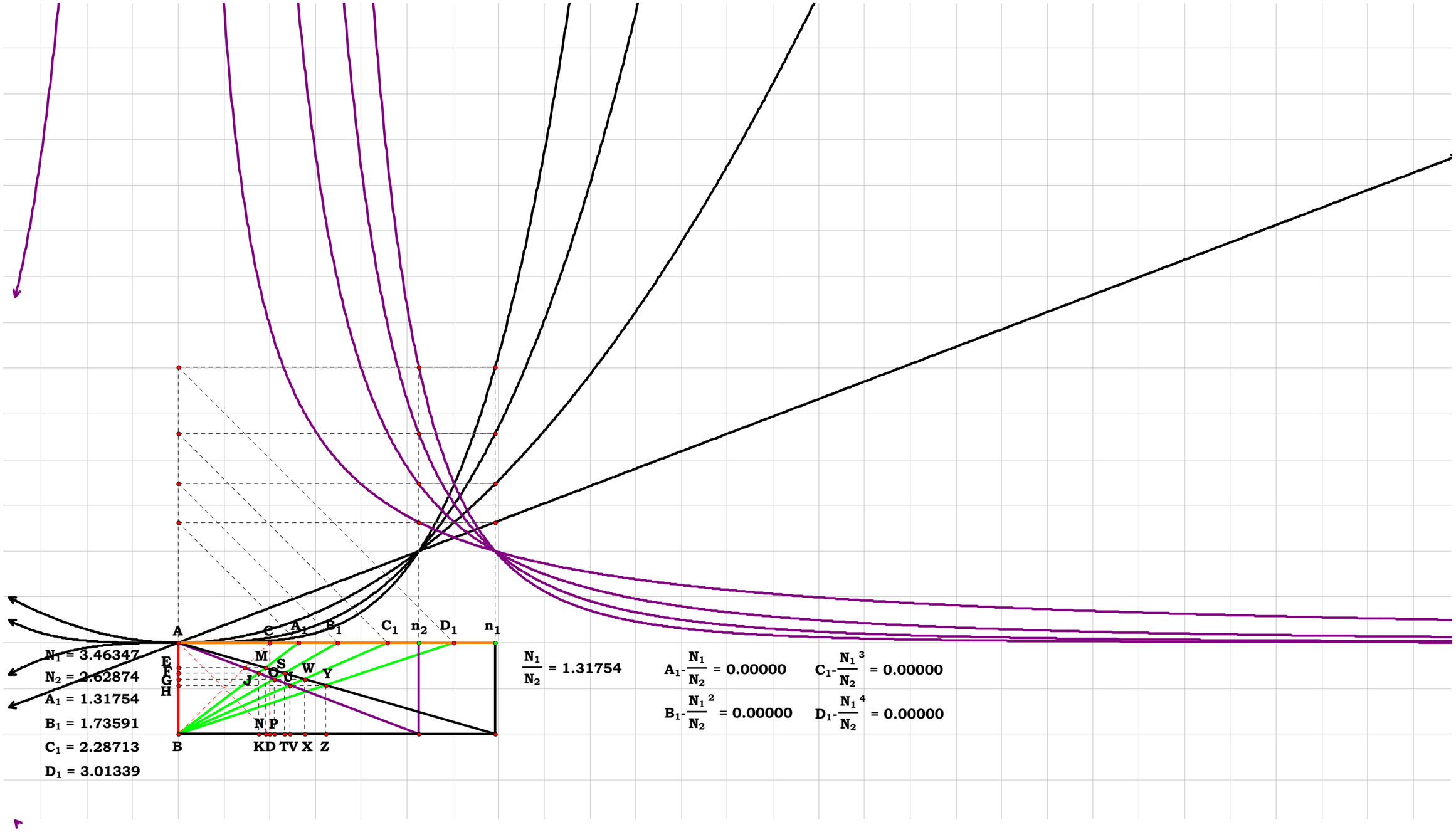
$B_1 = 1.73591$

$C_1 = 2.28713$

$D_1 = 3.01339$



$$A_1 - \frac{N_1}{N_2} = 0 \qquad B_1 - \left(\frac{N_1}{N_2}\right)^2 = 0 \qquad C_1 - \left(\frac{N_1}{N_2}\right)^3 = 0 \qquad D_1 - \left(\frac{N_1}{N_2}\right)^4 = 0$$



$N_1 = 3.46347$

$N_2 = 2.62874$

$A_1 = 1.31754$

$B_1 = 1.73591$

$C_1 = 2.28713$

$D_1 = 3.01339$

$\frac{N_1}{N_2} = 1.31754$

$A_1\text{-}\frac{N_1}{N_2} = 0.00000$ $\quad C_1\text{-}\frac{N_1^{\,3}}{N_2} = 0.00000$

$B_1\text{-}\frac{N_1^{\,2}}{N_2} = 0.00000$ $\quad D_1\text{-}\frac{N_1^{\,4}}{N_2} = 0.00000$

081112

$AB := 1$

$N_1 := 1.24957$

$N_2 := 2.52225$

$N_3 := .58657$

Although one can project the results from the origin, the exponential ladder is made behind it and must be completed anyway.

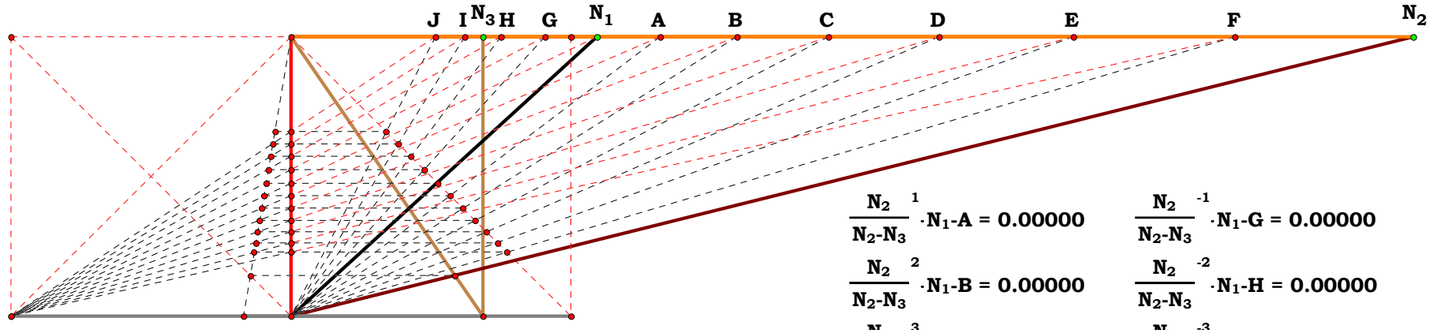
$$BI := 1 - \frac{N_2}{N_2 + N_3} \qquad BP := \frac{BI}{1 - BI} \qquad BF := \frac{1}{N_1 + 1}$$

$$FK := BP \cdot (1 - BF) \qquad R_2 := \frac{1 - FK}{BF} - 1 \qquad BE := \frac{1}{R_2 + 1}$$

$$EK := BP \cdot (1 - BE) \qquad R_1 := \frac{1 - EK}{BE} - 1 \qquad GM := \frac{BP \cdot N_1}{N_1 + 1 - BP}$$

$$BG := 1 - \frac{GM}{BP} \qquad R_3 := \frac{1}{BG} - 1 \qquad HN := \frac{BP \cdot R_3}{R_3 + 1 - BP}$$

$$BH := 1 - \frac{HN}{BP} \qquad R_4 := \frac{1}{BH} - 1$$



$\frac{N_1^{\frac{1}{4}} \cdot N_2^{\,4}}{N_2 - N_3} - D = 0.00000$

$\frac{N_1 \cdot N_2^{\,4}}{(N_2 - N_3)^4} - D = 0.00000$

$\frac{N_2}{N_2 - N_3} = 1.20647$

$N_1 = 1.09230$

$N_2 = 4.00439$

$N_3 = 0.68530$

A = 1.31783
B = 1.58992
C = 1.91819
D = 2.31425
E = 2.79207
F = 3.36855

G = 0.90537
H = 0.75043
I = 0.62200
J = 0.51556

$\left(\frac{N_2}{N_2 - N_3}\right)^{1} \cdot N_1 - A = 0.00000$

$\left(\frac{N_2}{N_2 - N_3}\right)^{2} \cdot N_1 - B = 0.00000$

$\left(\frac{N_2}{N_2 - N_3}\right)^{3} \cdot N_1 - C = 0.00000$

$\left(\frac{N_2}{N_2 - N_3}\right)^{4} \cdot N_1 - D = 0.00000$

$\left(\frac{N_2}{N_2 - N_3}\right)^{5} \cdot N_1 - E = 0.00000$

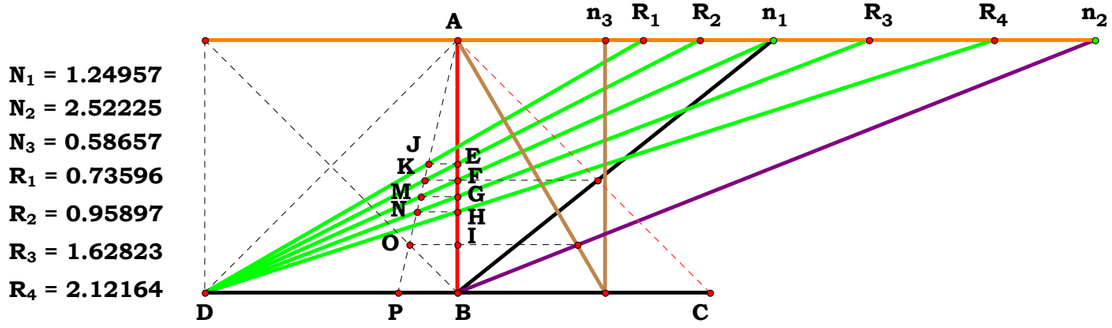
$\left(\frac{N_2}{N_2 - N_3}\right)^{6} \cdot N_1 - F = 0.00000$

$\left(\frac{N_2}{N_2 - N_3}\right)^{-1} \cdot N_1 - G = 0.00000$

$\left(\frac{N_2}{N_2 - N_3}\right)^{-2} \cdot N_1 - H = 0.00000$

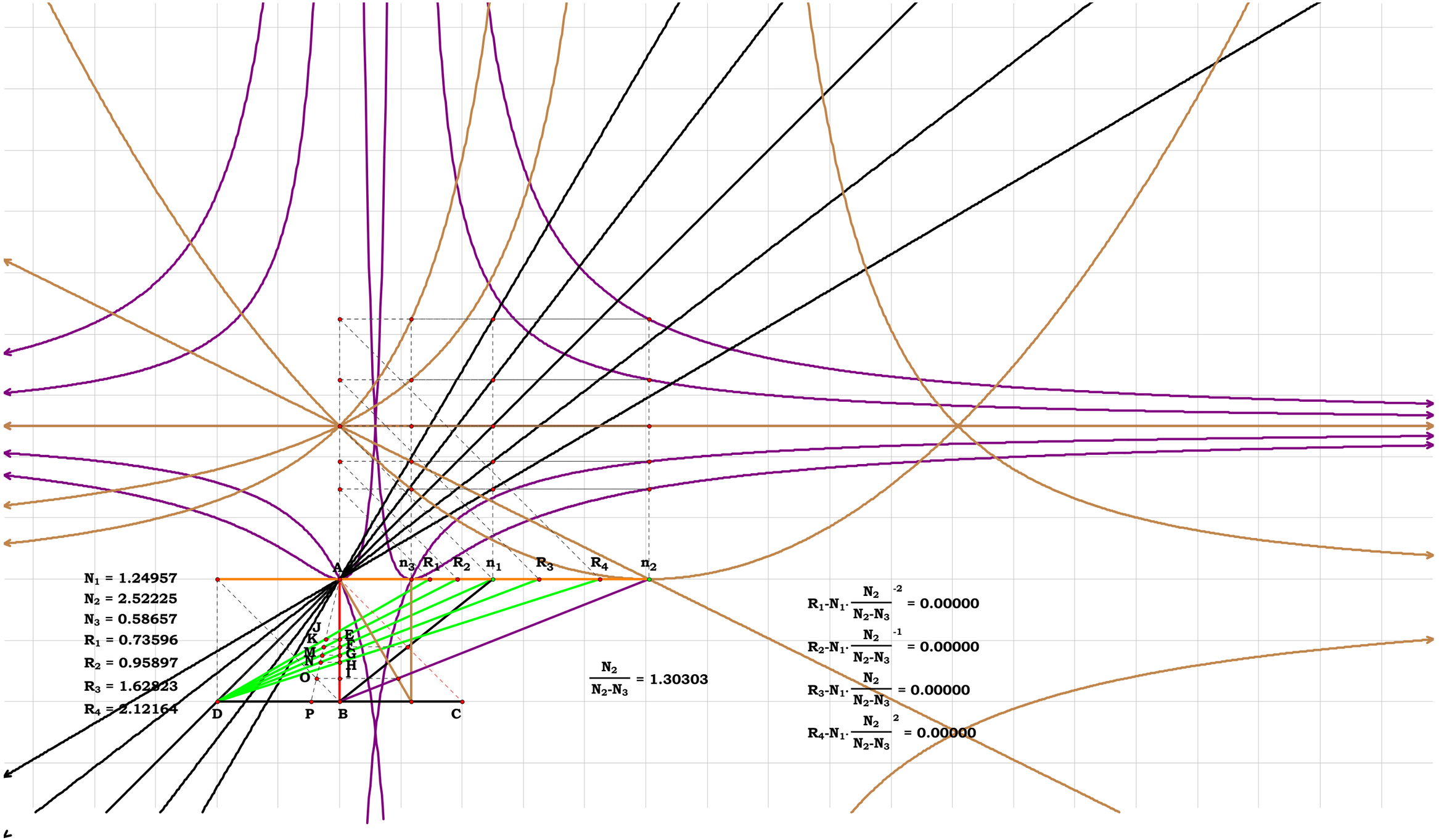
$\left(\frac{N_2}{N_2 - N_3}\right)^{-3} \cdot N_1 - I = 0.00000$

$\left(\frac{N_2}{N_2 - N_3}\right)^{-4} \cdot N_1 - J = 0.00000$



$$R_1 - \frac{N_1 \cdot (N_2 - N_3)^2}{N_2^{\,2}} = 0 \qquad R_2 - \frac{N_1 \cdot (N_2 - N_3)}{N_2} = 0 \qquad R_3 - \frac{N_1 \cdot N_2}{N_2 - N_3} = 0 \qquad R_4 - \frac{N_1 \cdot N_2^{\,2}}{(N_2 - N_3)^2} = 0$$

$$R_1 - N_1 \cdot \left(\frac{N_2}{N_2 - N_3}\right)^{-2} = 0 \qquad R_2 - N_1 \cdot \left(\frac{N_2}{N_2 - N_3}\right)^{-1} = 0 \qquad R_3 - N_1 \cdot \frac{N_2}{N_2 - N_3} = 0 \qquad R_4 - N_1 \cdot \left(\frac{N_2}{N_2 - N_3}\right)^{2} = 0$$



$N_1 = 1.24957$

$N_2 = 2.52225$

$N_3 = 0.58657$

$R_1 = 0.73596$

$R_2 = 0.95897$

$R_3 = 1.62823$

$R_4 = 2.12164$

$$\frac{N_2}{N_2-N_3} = 1.30303$$

$$R_1-N_1\cdot\left(\frac{N_2}{N_2-N_3}\right)^{-2} = 0.00000$$

$$R_2-N_1\cdot\left(\frac{N_2}{N_2-N_3}\right)^{-1} = 0.00000$$

$$R_3-N_1\cdot\frac{N_2}{N_2-N_3} = 0.00000$$

$$R_4-N_1\cdot\left(\frac{N_2}{N_2-N_3}\right)^{2} = 0.00000$$

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081212

$AB := 1$

$N_1 := 1.47934$

$BG := \frac{1}{N_1 + 1}$ $GS := 1 - BG$ $TU := \frac{1 - GS}{1 - BG}$

$BU := 1 - TU$ $GN := BU \cdot (1 - BG)$ $AC := \frac{1 - GN}{BG} - 1$

$AC = 1$ $BF := \frac{1}{1 + AC}$ $FM := BU \cdot (1 - BF)$

$R_2 := \frac{1 - FM}{BF} - 1$ $BE := \frac{1}{1 + R_2}$ $EK := BU \cdot (1 - BE)$

$R_1 := \frac{1 - EK}{BE} - 1$ $N_1 - \left(\frac{1}{BG} - 1\right) = 0$

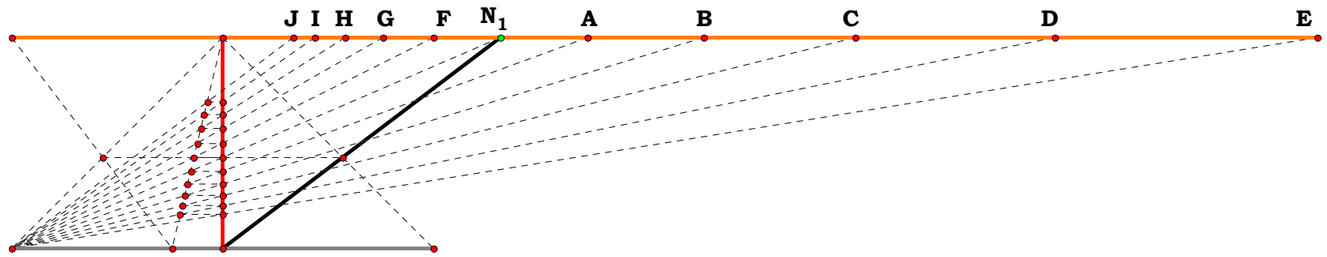
$HO := \frac{N_1 \cdot BU}{N_1 + 1 - BU}$ $BH := 1 - \frac{HO}{BU}$ $R_3 := \frac{1}{BH} - 1$

$JP := \frac{R_3 \cdot BU}{R_3 + 1 - BU}$ $BJ := 1 - \frac{JP}{BU}$ $R_4 := \frac{1}{BJ} - 1$

$R_1 = 0.456945$ $R_2 = 0.675977$ $R_3 = 2.188447$ $R_4 = 3.237457$

$R_1 - \frac{1}{N_1^{\,2}} = 0$ $R_2 - \frac{1}{N_1} = 0$ $AB - AC = 0$ $N_1 - N_1 = 0$ $R_3 - N_1^{\,2} = 0$ $R_4 - N_1^{\,3} = 0$

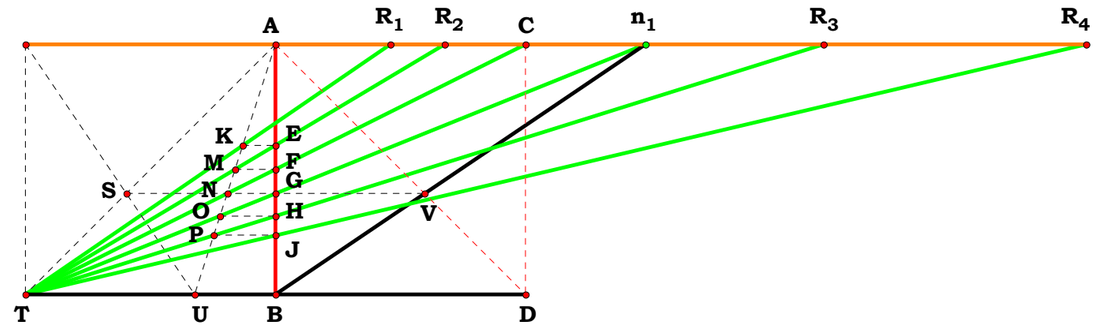
$R_1 - N_1^{\,-2} = 0$ $R_2 - N_1^{\,-1} = 0$ $AB - N_1^{\,0} = 0$ $N_1 - N_1^{\,1} = 0$ $R_3 - N_1^{\,2} = 0$ $R_4 - N_1^{\,3} = 0$

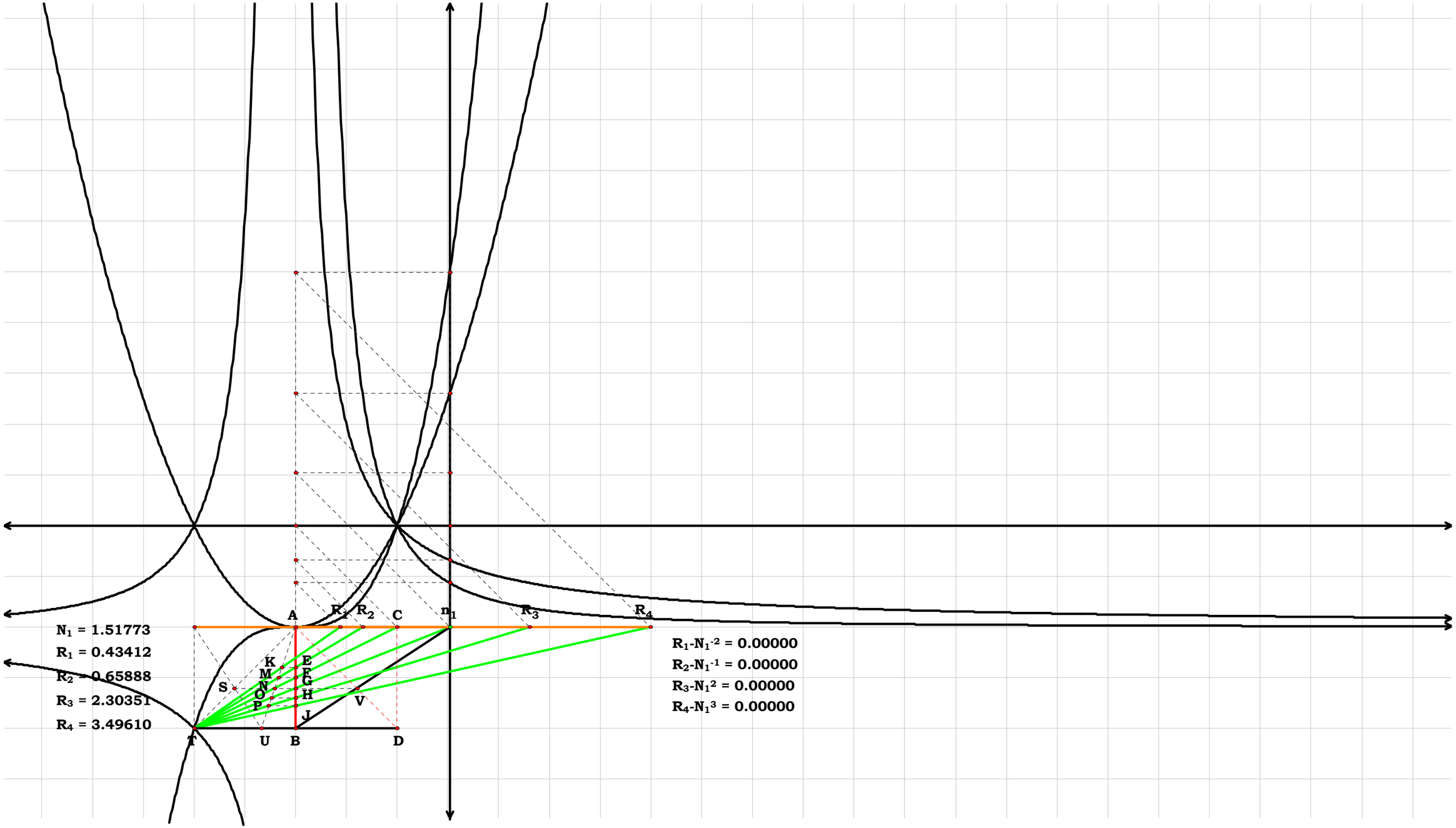


$N_1 = 1.31554$

A = 1.73065	F = 1.00000	N_1^2-A = 0.00000	N_1^0-F = 0.00000
B = 2.27675	G = 0.76014	N_1^3-B = 0.00000	N_1^{-1}-G = 0.00000
C = 2.99516	H = 0.57782	N_1^4-C = 0.00000	N_1^{-2}-H = 0.00000
D = 3.94026	I = 0.43922	N_1^5-D = 0.00000	N_1^{-3}-I = 0.00000
E = 5.18358	J = 0.33387	N_1^6-E = 0.00000	N_1^{-4}-J = 0.00000

$N_1 = 1.47934$
$R_1 = 0.45694$
$R_2 = 0.67598$
$R_3 = 2.18845$
$R_4 = 3.23746$




A
R_1
R_2
C
n_1
R_3
R_4
K
M
N
O
P
S
E
F
G
H
J
V
T
U
B
D
N_1 = 1.51773
R_1 = 0.43412
R_2 = 0.65888
R_3 = 2.30351
R_4 = 3.49610
R_1-N_1^{-2} = 0.00000
R_2-N_1^{-1} = 0.00000
R_3-N_1^{2} = 0.00000
R_4-N_1^{3} = 0.00000

081312

$AB := 1$

$N_1 := 1.97774$

$N_2 := 1.45792$

$N_3 := 1.89462$

$BF := \frac{1}{N_1 + 1}$ $JL := \frac{1}{N_2 + 1}$ $KL := \frac{1}{N_3 + 1}$ $BX := \frac{JL}{1 - JL}$

$BW := \frac{KL}{1 - KL}$ $FP := BX \cdot (1 - BF)$ $FO := BW \cdot (1 - BF)$

$R_3 := \frac{FP}{BF}$ $R_2 := \frac{FO}{BF}$ $BE := \frac{BX}{R_2 + BX}$ $EM := BW \cdot (1 - BE)$

$R_1 := \frac{EM}{BE}$ $BG := \frac{BW}{R_3 + BW}$ $GR := BX \cdot (1 - BG)$ $R_4 := \frac{GR}{BG}$

$BH := \frac{BW}{R_4 + BW}$ $HT := BX \cdot (1 - BH)$ $R_5 := \frac{HT}{BH}$ $BI := \frac{BW}{R_5 + BW}$

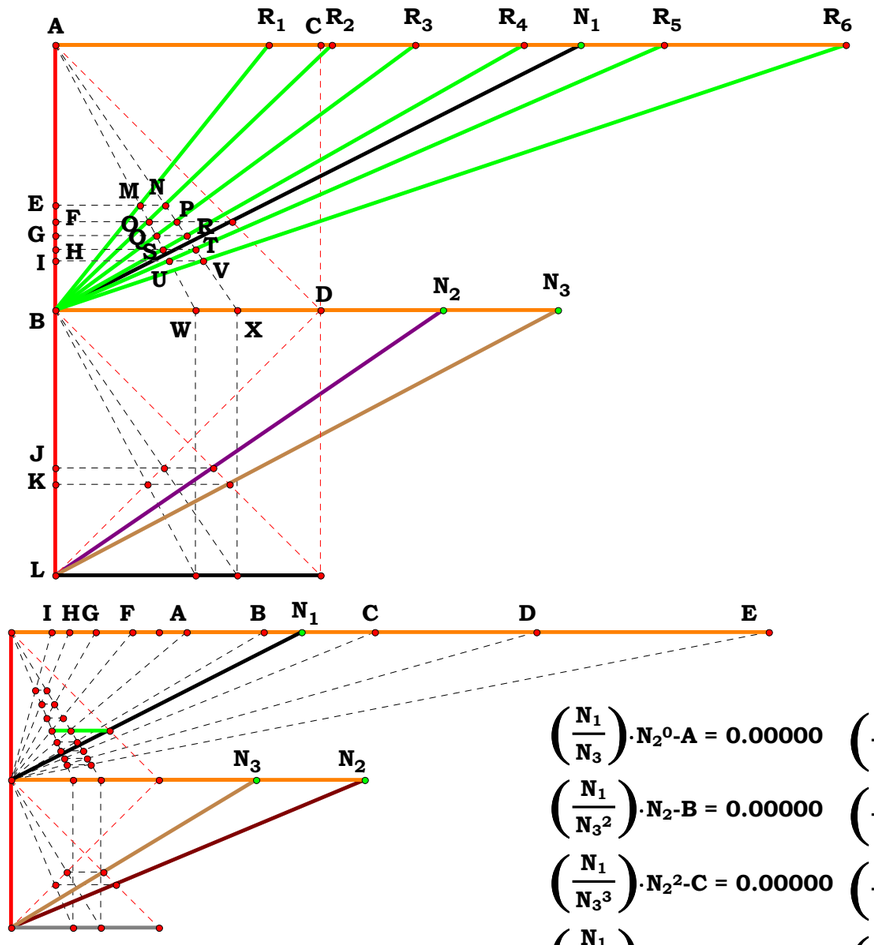
$IV := BX \cdot (1 - BI)$ $R_6 := \frac{IV}{BI}$

I reordered N_2 and N_3.

$R_1 - \frac{N_1 \cdot N_2}{{N_3}^2} = 0$ $R_2 - \frac{N_1}{N_3} = 0$ $R_3 - \frac{N_1}{N_2} = 0$

$R_4 - \frac{N_1 \cdot N_3}{{N_2}^2} = 0$ $R_5 - \frac{N_1 \cdot {N_3}^2}{{N_2}^3} = 0$ $R_6 - \frac{N_1 \cdot {N_3}^3}{{N_2}^4} = 0$

$N_1 = 1.97774$
$N_2 = 1.45792$
$N_3 = 1.89462$
$R_1 = 0.80326$
$R_2 = 1.04387$
$R_3 = 1.35655$
$R_4 = 1.76289$
$R_5 = 2.29095$
$R_6 = 2.97718$



$N_1 = 1.95987$
$N_2 = 2.39124$
$N_3 = 1.65771$

$A = 1.18227$
$B = 1.70541$
$C = 2.46005$
$D = 3.54859$
$E = 5.11881$

$F = 0.81960$
$G = 0.56819$
$H = 0.39389$
$I = 0.27306$

$\left(\frac{N_1}{N_3}\right) \cdot {N_2}^0\text{-A} = 0.00000$ $\left(\frac{N_1}{{N_3}^0}\right) \cdot {N_2}^{-1}\text{-F} = 0.00000$

$\left(\frac{N_1}{{N_3}^2}\right) \cdot N_2\text{-B} = 0.00000$ $\left(\frac{N_1}{{N_3}^{-1}}\right) \cdot {N_2}^{-2}\text{-G} = 0.00000$

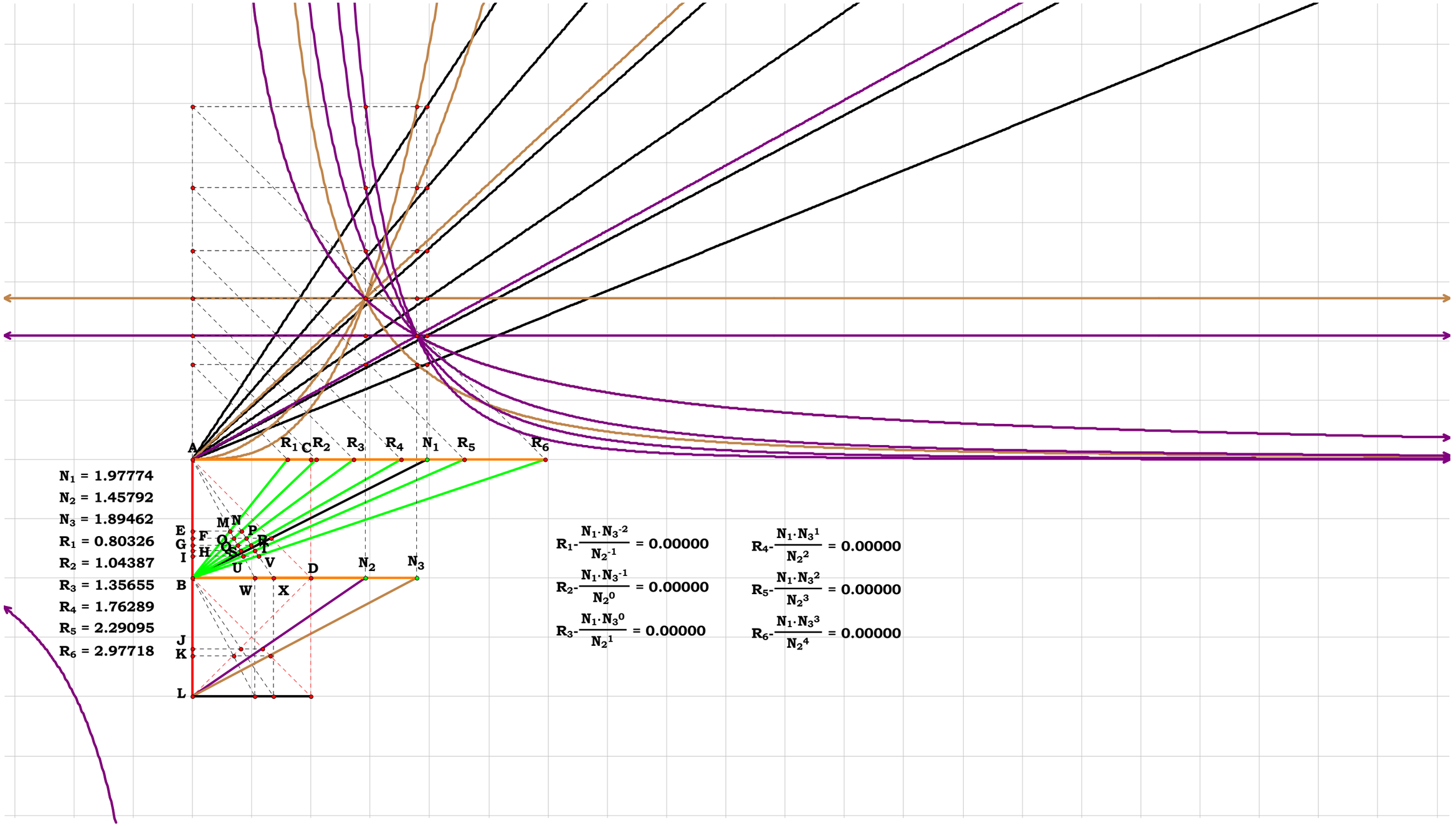
$\left(\frac{N_1}{{N_3}^3}\right) \cdot {N_2}^2\text{-C} = 0.00000$ $\left(\frac{N_1}{{N_3}^{-2}}\right) \cdot {N_2}^{-3}\text{-H} = 0.00000$

$\left(\frac{N_1}{{N_3}^4}\right) \cdot {N_2}^3\text{-D} = 0.00000$ $\left(\frac{N_1}{{N_3}^{-3}}\right) \cdot {N_2}^{-4}\text{-I} = 0.00000$

$\left(\frac{N_1}{{N_3}^5}\right) \cdot {N_2}^4\text{-E} = 0.00000$

from which one can derive:

$R_1 - \frac{N_1}{{N_2}^{-1}} \cdot {N_3}^{-2} = 0$ $R_2 - \frac{N_1}{{N_2}^0} \cdot {N_3}^{-1} = 0$ $R_3 - \frac{N_1}{{N_2}^1} \cdot {N_3}^0 = 0$ $R_4 - \frac{N_1}{{N_2}^2} \cdot {N_3}^1 = 0$ $R_5 - \frac{N_1}{{N_2}^3} \cdot {N_3}^2 = 0$ $R_6 - \frac{N_1}{{N_2}^4} \cdot {N_3}^3 = 0$



$N_1 = 1.97774$

$N_2 = 1.45792$

$N_3 = 1.89462$

$R_1 = 0.80326$

$R_2 = 1.04387$

$R_3 = 1.35655$

$R_4 = 1.76289$

$R_5 = 2.29095$

$R_6 = 2.97718$

$$R_1 - \frac{N_1 \cdot N_3^{-2}}{N_2^{-1}} = 0.00000$$

$$R_2 - \frac{N_1 \cdot N_3^{-1}}{N_2^{0}} = 0.00000$$

$$R_3 - \frac{N_1 \cdot N_3^{0}}{N_2^{1}} = 0.00000$$

$$R_4 - \frac{N_1 \cdot N_3^{1}}{N_2^{2}} = 0.00000$$

$$R_5 - \frac{N_1 \cdot N_3^{2}}{N_2^{3}} = 0.00000$$

$$R_6 - \frac{N_1 \cdot N_3^{3}}{N_2^{4}} = 0.00000$$

081712

$AB := 1$

$N_1 := 1.53478$

$N_2 := -0.54429$

$$BE := \frac{N_2 + 1}{N_1 + N_2 + 1} \qquad EK := \frac{N_1 \cdot N_2}{N_1 + 1 + N_2} \qquad R_1 := \frac{EK}{BE}$$

$$BJ := \frac{N_2 + 1}{N_2 + 1 + R_1} \qquad JP := \frac{R_1 \cdot N_2}{R_1 + 1 + N_2} \qquad R_2 := \frac{JP}{BJ}$$

$$BF := \frac{N_2 + 1}{N_2 + 1 + R_2} \qquad FM := \frac{R_2 \cdot N_2}{R_2 + 1 + N_2} \qquad R_3 := \frac{FM}{BF}$$

$$BH := \frac{N_2 + 1}{N_2 + 1 + R_3} \qquad HO := \frac{R_3 \cdot N_2}{R_3 + 1 + N_2} \qquad R_4 := \frac{HO}{BH}$$

$$BG := \frac{N_2 + 1}{N_2 + 1 + R_4} \qquad GN := \frac{R_4 \cdot N_2}{R_4 + 1 + N_2} \qquad R_5 := \frac{GN}{BG}$$

$R_1 = -1.833107$ $R_2 = 2.189423$ $R_3 = -2.614999$

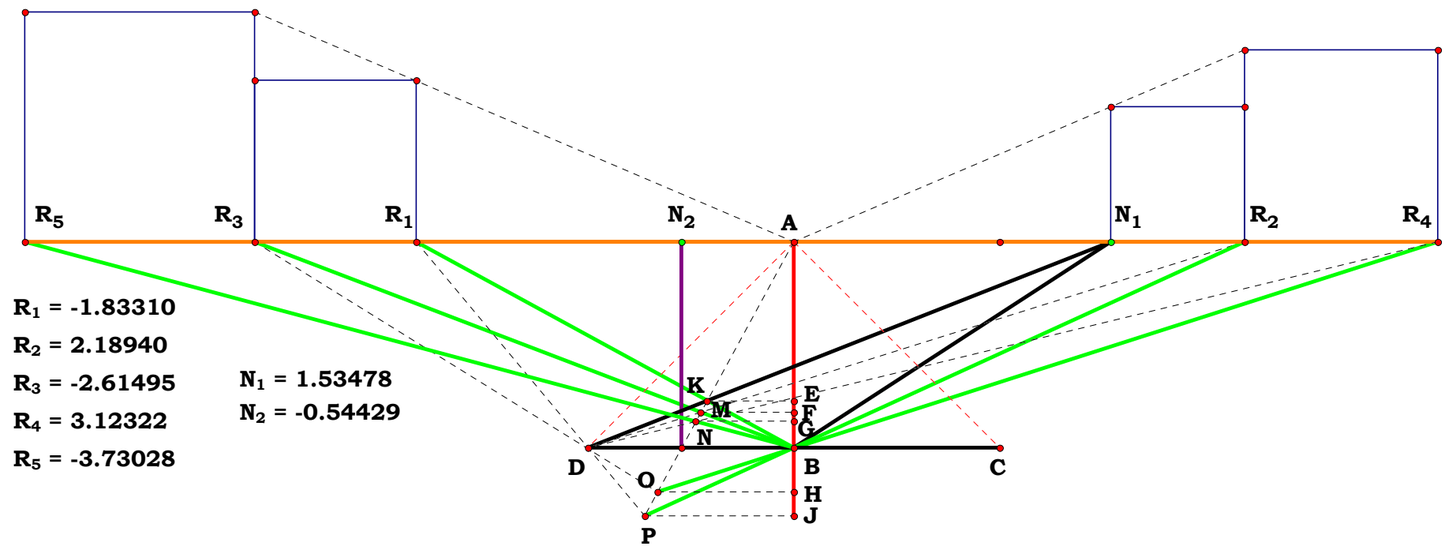
$R_4 = 3.123297$ $R_5 = -3.730398$

$$R_1 - \frac{N_1 \cdot N_2}{N_2 + 1} = 0 \qquad R_2 - \frac{N_2 \cdot R_1}{N_2 + 1} = 0 \qquad R_3 - \frac{N_2 \cdot R_2}{N_2 + 1} = 0$$

$$R_4 - \frac{N_2 \cdot R_3}{N_2 + 1} = 0 \qquad R_5 - \frac{N_2 \cdot R_4}{N_2 + 1} = 0$$

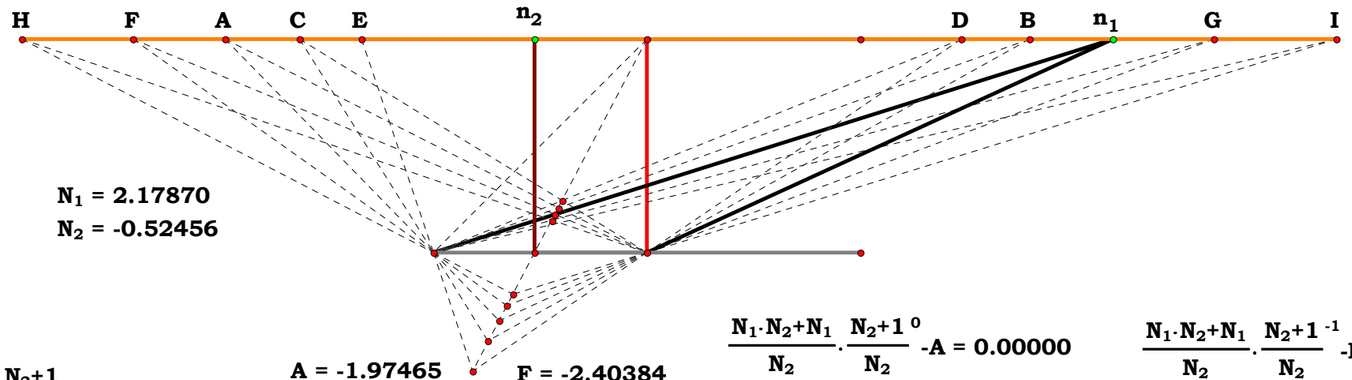
$$R_1 - \left(\frac{N_2}{N_2 + 1}\right)^1 \cdot N_1 = 0 \qquad R_2 - \left(\frac{N_2}{N_2 + 1}\right)^2 \cdot N_1 = 0$$

$$R_3 - \left(\frac{N_2}{N_2 + 1}\right)^3 \cdot N_1 = 0 \qquad R_4 - \left(\frac{N_2}{N_2 + 1}\right)^4 \cdot N_1 = 0 \qquad R_5 - \left(\frac{N_2}{N_2 + 1}\right)^5 \cdot N_1 = 0$$



$R_1 = -1.83310$
$R_2 = 2.18940$
$R_3 = -2.61495$
$R_4 = 3.12322$
$R_5 = -3.73028$

$N_1 = 1.53478$
$N_2 = -0.54429$



$N_1 = 2.17870$
$N_2 = -0.52456$

$\frac{N_2+1}{N_2} = -0.90634$

$\frac{N_1 \cdot N_2+N_1}{N_2} = -1.97465$

$A = -1.97465$
$B = 1.78970$
$C = -1.62208$
$D = 1.47016$
$E = -1.33247$
$F = -2.40384$
$G = 2.65225$
$H = -2.92632$
$I = 3.22872$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{0} - A = 0.00000 \qquad \frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-1} - N_1 = 0.00000$$

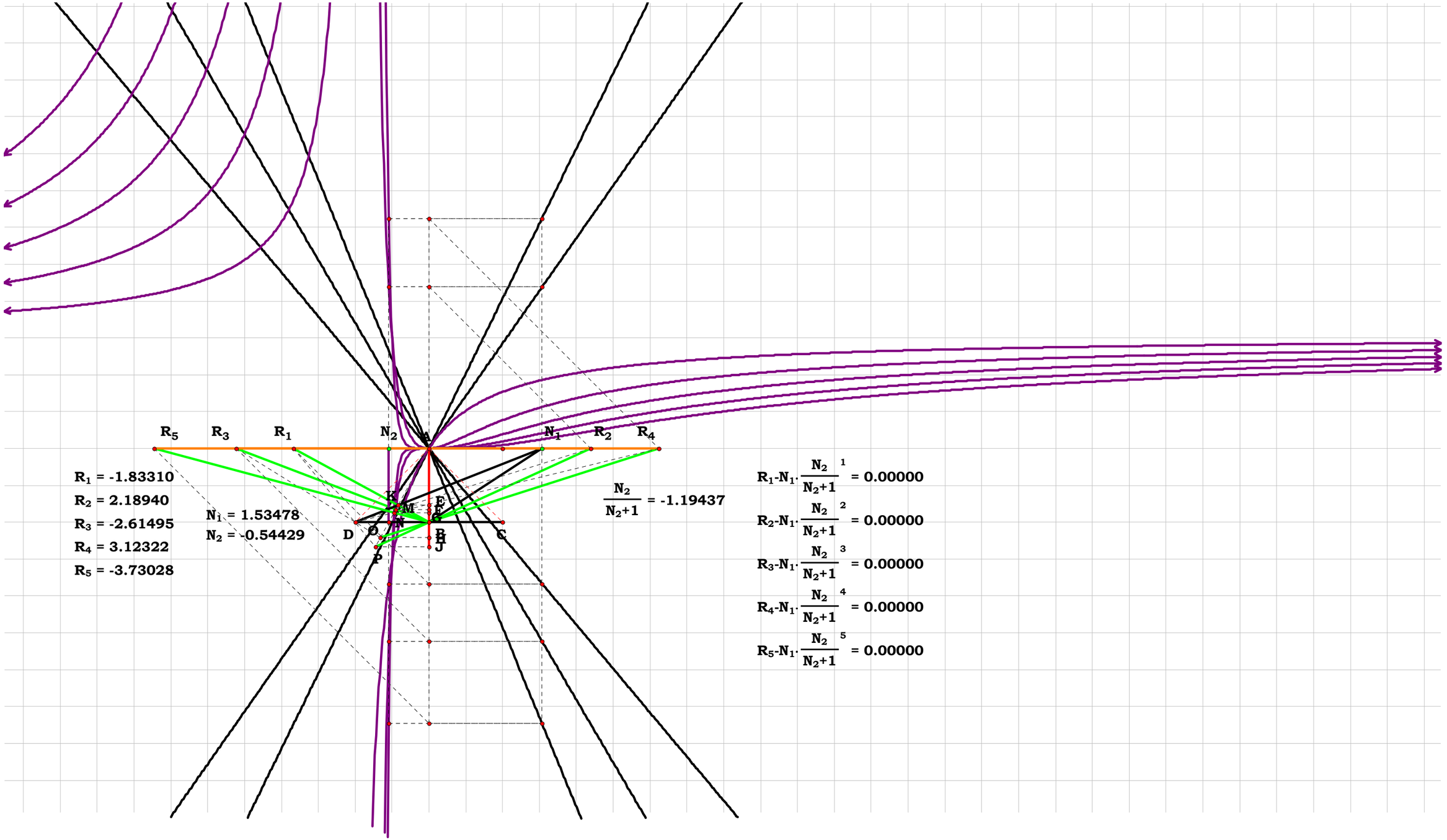
$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{1} - B = 0.00000 \qquad \frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-2} - F = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{2} - C = 0.00000 \qquad \frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-3} - G = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{3} - D = 0.00000 \qquad \frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-4} - H = 0.00000$$

$$\frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{4} - E = 0.00000 \qquad \frac{N_1 \cdot N_2+N_1}{N_2} \cdot \frac{N_2+1}{N_2}^{-5} - I = 0.00000$$

Writing these out does have an adantage!



$R_1 = -1.83310$

$R_2 = 2.18940$

$R_3 = -2.61495$

$R_4 = 3.12322$

$R_5 = -3.73028$

$N_1 = 1.53478$

$N_2 = -0.54429$

$$\frac{N_2}{N_2+1} = -1.19437$$

$$R_1 - N_1 \cdot \left(\frac{N_2}{N_2+1}\right)^1 = 0.00000$$

$$R_2 - N_1 \cdot \left(\frac{N_2}{N_2+1}\right)^2 = 0.00000$$

$$R_3 - N_1 \cdot \left(\frac{N_2}{N_2+1}\right)^3 = 0.00000$$

$$R_4 - N_1 \cdot \left(\frac{N_2}{N_2+1}\right)^4 = 0.00000$$

$$R_5 - N_1 \cdot \left(\frac{N_2}{N_2+1}\right)^5 = 0.00000$$

090912-1

$AB := 1$

$N_1 := 2.47834$

$N_2 := 1.69523$

Here, I take the square root output of both variables and use them to project to the unit perpendicular tail to project two parallels upon which I construct the recursive series.

$$BE := \frac{1}{N_2 + 1} \qquad BF := \frac{1}{N_1 + 1} \qquad AE := AB - BE$$

$$AF := AB - BF \qquad EG := \sqrt{AE \cdot BE} \qquad FH := \sqrt{AF \cdot BF}$$

$$DM := \frac{BE}{EG} \qquad DR := \frac{BF}{FH} \qquad R_1 := \frac{FH}{BF} \cdot DM$$

$$R_2 := \frac{R_1}{DR} \cdot DM \qquad R_3 := \frac{R_2}{DR} \cdot DM \qquad R_4 := \frac{R_3}{DR} \cdot DM$$

$$R_1 - \frac{\sqrt{N_1}}{\sqrt{N_2}} = 0 \qquad R_2 - \left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^2 = 0 \qquad R_1 = 1.209111$$

$$R_2 = 1.461949$$

$$R_3 - \left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^3 = 0 \qquad R_4 - \left(\frac{\sqrt{N_1}}{\sqrt{N_2}}\right)^4 = 0 \qquad R_3 = 1.767659$$

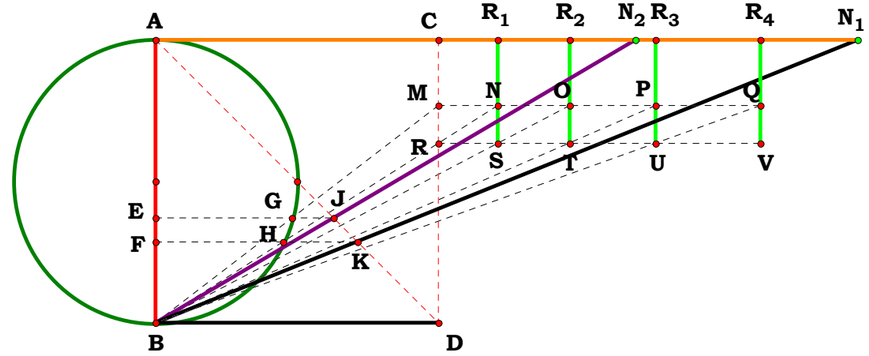
$$R_4 = 2.137295$$

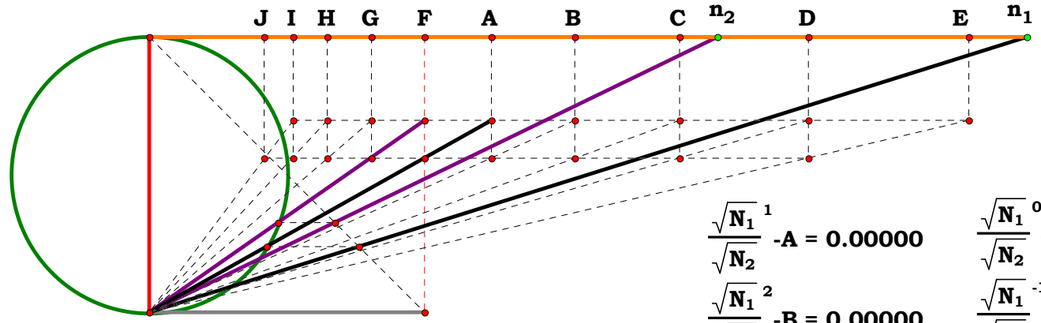
$N_1 := -2.47834$

$N_2 := -1.69523$

Now here is proof positive that current mathematical linguistic comprehension is grossly in error. Some math packages will not give this result, currently there is some dissent in the mathematical community. However, do the figure, there is absolutely no results for so called negative values. If your life depended upon accurate results, would this program satisfy you?

$N_1 = 2.47834$
$N_2 = 1.69523$
$R_1 = 1.20911$
$R_2 = 1.46194$
$R_3 = 1.76765$
$R_4 = 2.13728$





$\frac{\sqrt{N_1}}{\sqrt{N_2}} = 1.24338$

$N_1 = 3.18458$
$N_2 = 2.05988$

$A = 1.24338$ $F = 1.00000$
$B = 1.54601$ $G = 0.80426$
$C = 1.92228$ $H = 0.64683$
$D = 2.39013$ $I = 0.52022$
$E = 2.97185$ $J = 0.41839$

$\frac{\sqrt{N_1}^{1}}{\sqrt{N_2}}$ -A = 0.00000 $\frac{\sqrt{N_1}^{0}}{\sqrt{N_2}}$ -F = 0.00000

$\frac{\sqrt{N_1}^{2}}{\sqrt{N_2}}$ -B = 0.00000 $\frac{\sqrt{N_1}^{-1}}{\sqrt{N_2}}$ -G = 0.00000

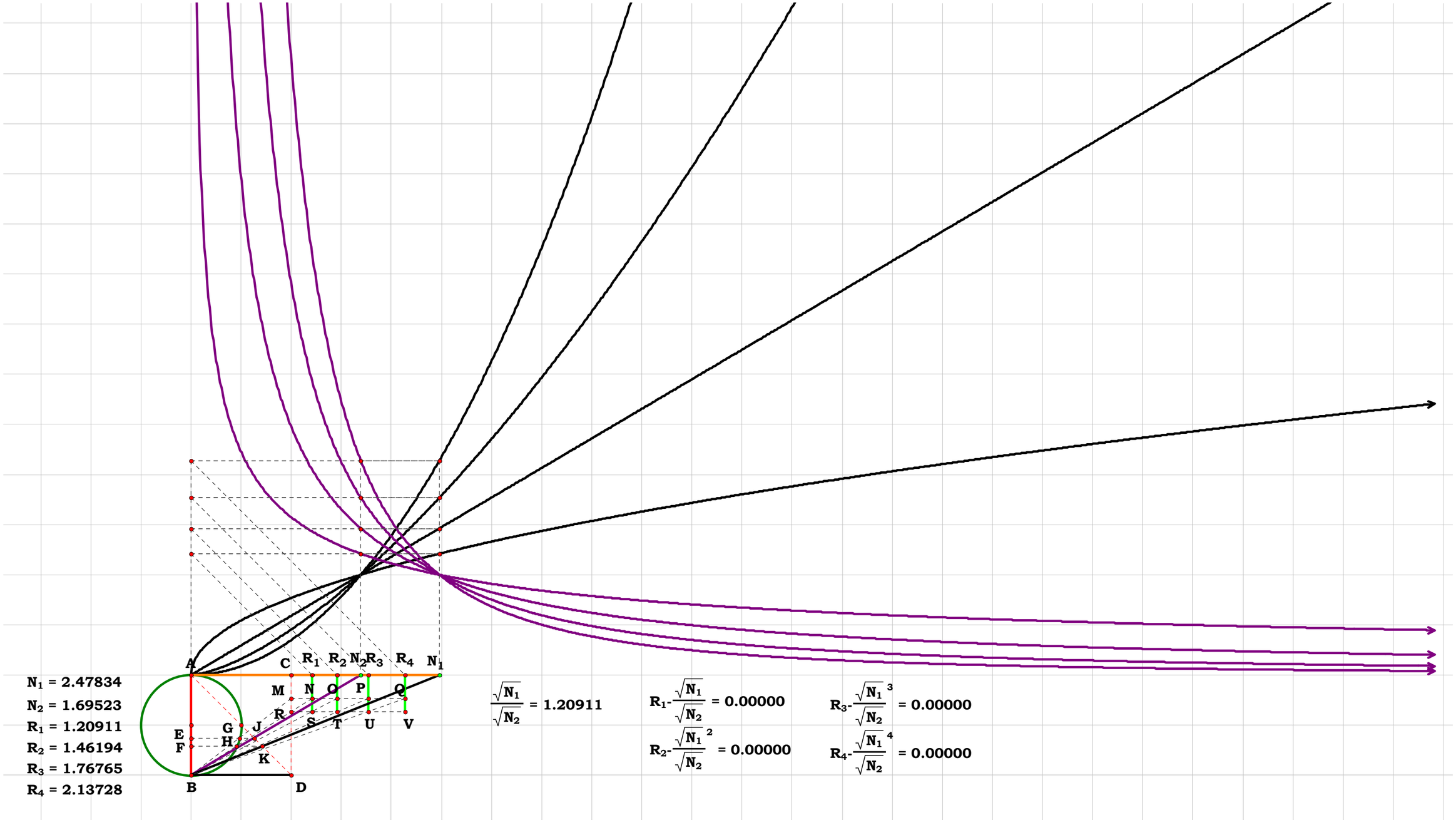
$\frac{\sqrt{N_1}^{3}}{\sqrt{N_2}}$ -C = 0.00000 $\frac{\sqrt{N_1}^{-2}}{\sqrt{N_2}}$ -H = 0.00000

$\frac{\sqrt{N_1}^{4}}{\sqrt{N_2}}$ -D = 0.00000 $\frac{\sqrt{N_1}^{-3}}{\sqrt{N_2}}$ -I = 0.00000

$\frac{\sqrt{N_1}^{5}}{\sqrt{N_2}}$ -E = 0.00000 $\frac{\sqrt{N_1}^{-4}}{\sqrt{N_2}}$ -J = 0.00000

$$(N_1 + 1) \cdot \sqrt{\frac{N_1}{(N_1 + 1)^2}} = -1.574274i \qquad \sqrt{N_1} = 1.574274i$$

$$\frac{(N_1 + 1) \cdot \sqrt{\frac{N_1}{(N_1 + 1)^2}}}{(N_2 + 1) \cdot \sqrt{\frac{N_2}{(N_2 + 1)^2}}} = 1.209111 \qquad \frac{\sqrt{N_1}}{\sqrt{N_2}} = 1.209111$$



$N_1 = 2.47834$

$N_2 = 1.69523$

$R_1 = 1.20911$

$R_2 = 1.46194$

$R_3 = 1.76765$

$R_4 = 2.13728$

$\frac{\sqrt{N_1}}{\sqrt{N_2}} = 1.20911$

$R_1 - \frac{\sqrt{N_1}}{\sqrt{N_2}} = 0.00000$

$R_2 - \frac{\sqrt{N_1}^{\,2}}{\sqrt{N_2}} = 0.00000$

$R_3 - \frac{\sqrt{N_1}^{\,3}}{\sqrt{N_2}} = 0.00000$

$R_4 - \frac{\sqrt{N_1}^{\,4}}{\sqrt{N_2}} = 0.00000$

090912-2

$AB := 1$

$N_1 := 1.76087$

$N_2 := 3.81671$

$DK := \frac{1}{N_2 + 1}$ $FK := \frac{1}{N_1}$ $R_2 := \frac{1 - DK}{FK}$

$EK := \frac{1}{R_2}$ $R_1 := \frac{1 - DK}{EK}$ $GK := FK \cdot (1 - DK)$

$R_3 := \frac{1}{GK}$ $HK := GK \cdot (1 - DK)$ $R_4 := \frac{1}{HK}$

$R_1 = 1.105617$ $R_2 = 1.395295$

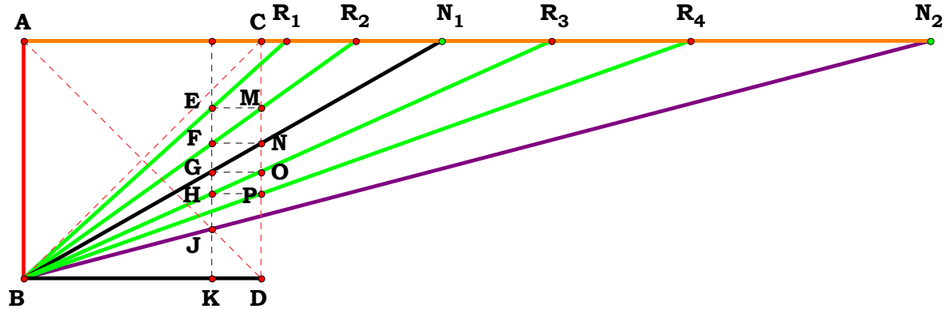
$R_3 = 2.222228$ $R_4 = 2.804465$

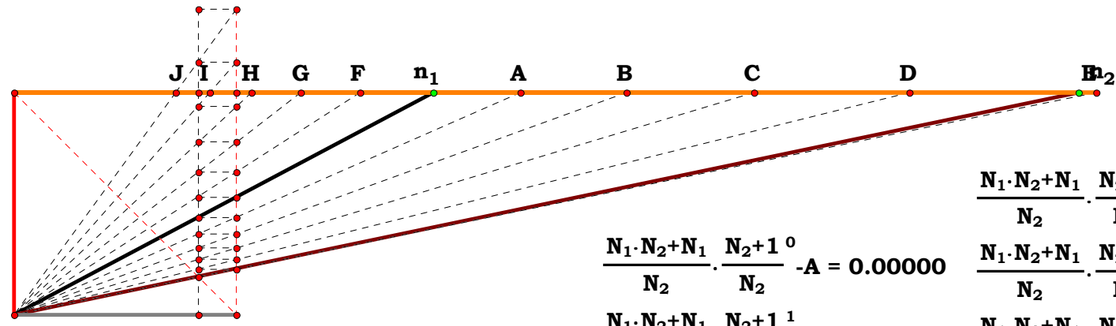
$R_1 - \left[\frac{(N_2 + 1)}{N_2}\right]^{-2} \cdot N_1 = 0$ $R_2 - \left[\frac{(N_2 + 1)}{N_2}\right]^{-1} \cdot N_1 = 0$

$N_1 - \left[\frac{(N_2 + 1)}{N_2}\right]^{0} \cdot N_1 = 0$ $R_3 - \left[\frac{(N_2 + 1)}{N_2}\right]^{1} \cdot N_1 = 0$

$R_4 - \left[\frac{(N_2 + 1)}{N_2}\right]^{2} \cdot N_1 = 0$

$N_1 = 1.76087$
$N_2 = 3.81671$
$R_1 = 1.10562$
$R_2 = 1.39530$
$R_3 = 2.22223$
$R_4 = 2.80447$





$\frac{N_1 \cdot N_2 + N_1}{N_2} = 2.27629$

$\frac{N_2 + 1}{N_2} = 1.20903$

$N_1 = 1.88273$
$N_2 = 4.78390$

$A = 2.27629$ $F = 1.55722$
$B = 2.75211$ $G = 1.28799$
$C = 3.32740$ $H = 1.06530$
$D = 4.02294$ $I = 0.88112$
$E = 4.86387$ $J = 0.72878$

$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{0} - A = 0.00000$

$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{1} - B = 0.00000$

$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{2} - C = 0.00000$

$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{3} - D = 0.00000$

$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{4} - E = 0.00000$

$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{-1} - N_1 = 0.00000$

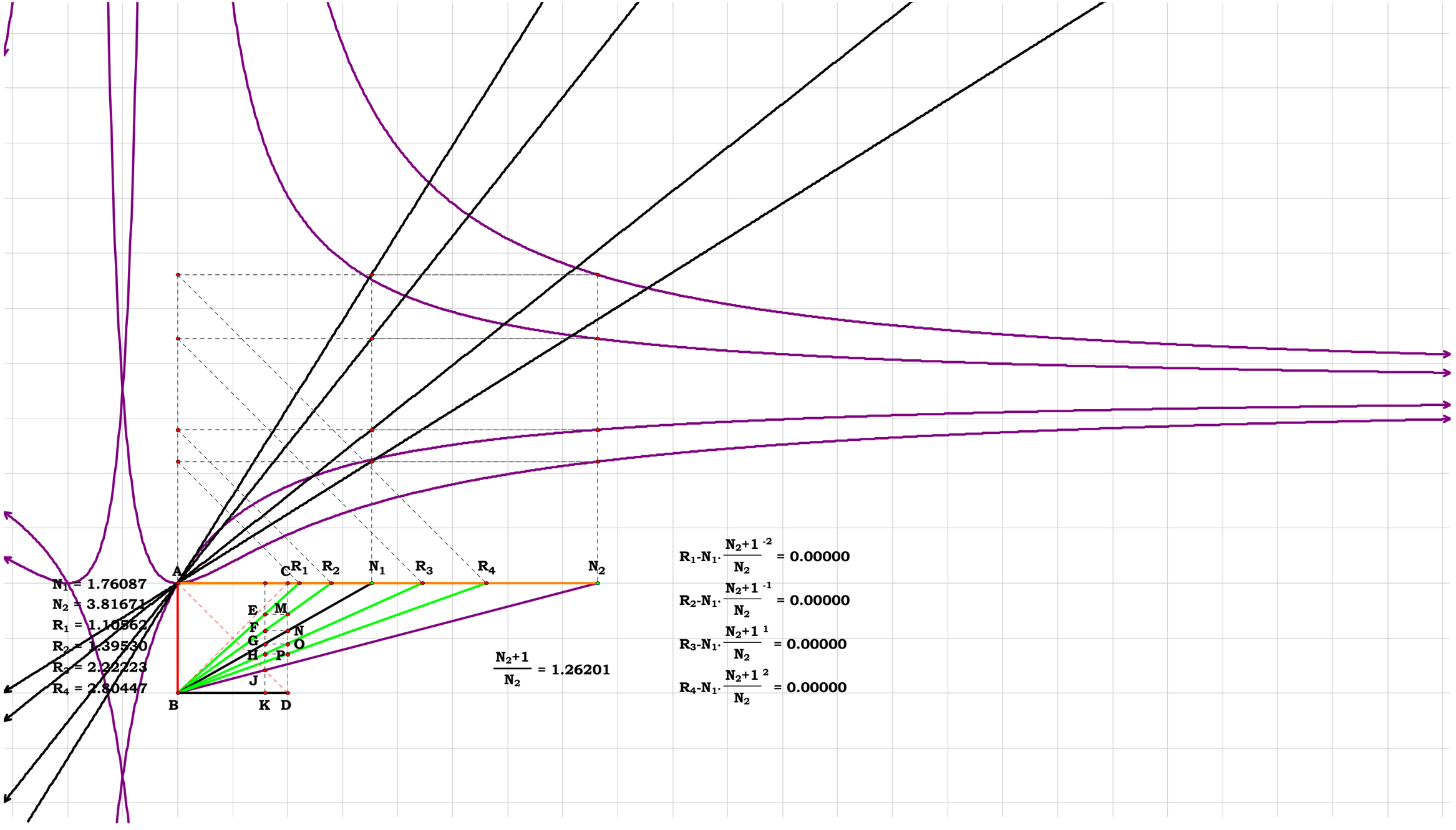
$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{-2} - F = 0.00000$

$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{-3} - G = 0.00000$

$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{-4} - H = 0.00000$

$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{-5} - I = 0.00000$

$\frac{N_1 \cdot N_2 + N_1}{N_2} \cdot \frac{N_2 + 1}{N_2}^{-6} - J = 0.00000$


A
B
C
D
E
F
G
H
J
K
M
N
O
P
R_1
R_2
R_3
R_4
N_1
N_2
N_1 = 1.76087
N_2 = 3.81671
R_1 = 1.10562
R_2 = 1.39530
R_3 = 2.22223
R_4 = 2.80447
$\frac{N_2+1}{N_2}$ = 1.26201
$R_1-N_1\cdot\frac{N_2+1}{N_2}^{-2}$ = 0.00000
$R_2-N_1\cdot\frac{N_2+1}{N_2}^{-1}$ = 0.00000
$R_3-N_1\cdot\frac{N_2+1}{N_2}^{1}$ = 0.00000
$R_4-N_1\cdot\frac{N_2+1}{N_2}^{2}$ = 0.00000

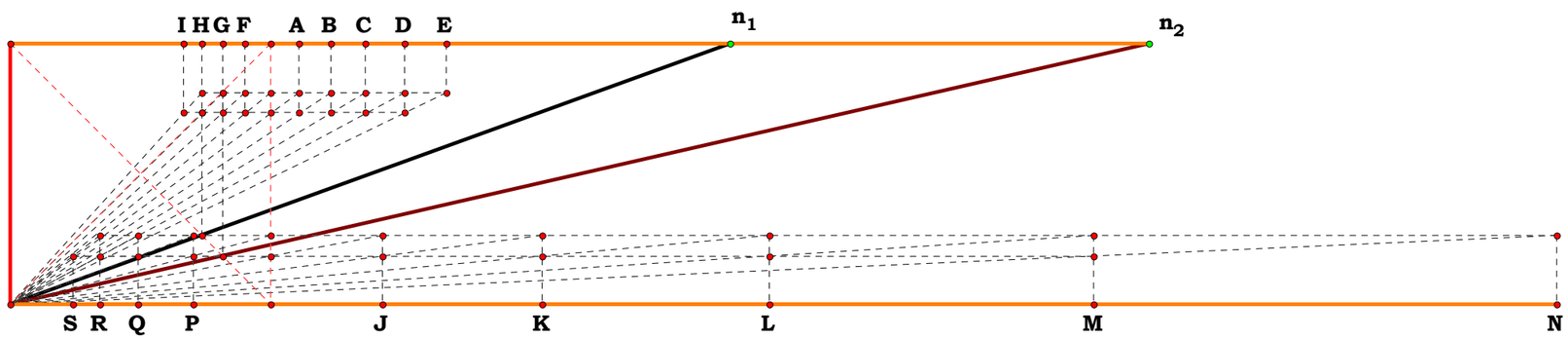
090912-3

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)} = 1.10854$$

A = 1.10854
B = 1.22886
C = 1.36225
D = 1.51010
E = 1.67401
F = 0.90209
G = 0.81376
H = 0.73408
I = 0.66221

$$\frac{N_2\cdot(N_1+1)^{1}}{N_1\cdot(N_2+1)} - A = 0.00000$$
$$\frac{N_2\cdot(N_1+1)^{2}}{N_1\cdot(N_2+1)} - B = 0.00000$$
$$\frac{N_2\cdot(N_1+1)^{3}}{N_1\cdot(N_2+1)} - C = 0.00000$$
$$\frac{N_2\cdot(N_1+1)^{4}}{N_1\cdot(N_2+1)} - D = 0.00000$$
$$\frac{N_2\cdot(N_1+1)^{5}}{N_1\cdot(N_2+1)} - E = 0.00000$$

$$\frac{N_2\cdot(N_1+1)^{-1}}{N_1\cdot(N_2+1)} - F = 0.00000$$
$$\frac{N_2\cdot(N_1+1)^{-2}}{N_1\cdot(N_2+1)} - G = 0.00000$$
$$\frac{N_2\cdot(N_1+1)^{-3}}{N_1\cdot(N_2+1)} - H = 0.00000$$
$$\frac{N_2\cdot(N_1+1)^{-4}}{N_1\cdot(N_2+1)} - I = 0.00000$$



This plate demonstrates two series. One may also infer that for every plate I project from the bottom of the origin, I can make a different plate of it by projecting from the top origin so that each plate like this one could have a minimum of four demonstrations. One can, in fact, project anywhere on the origin wall by adding another variable to the equation as I have done on other plates.

If one works with Geometer's Sketchpad, they will quickly notice that unlike any other drawing prgram one may have, it does not have a zoom feature so one can work in small places. One either has to manually enlarge the figure, or one can print the figure to a PDF file and use the zoom feature of the reader. These print as vector graphics so one can zoom in as far as they like. My early drawings, a long time ago, were done in TommyCad, which one could zoom in as far as they like, however, it did not have motion in mind when that program was written, nor did it have the idea of writing up figures using equations.

One may also notice that where one starts a sequence from determines the resulting equation also. For example, these plates start the series from the unit perpendicular operational tail. I could have started the sequence from the operational tails of either variable as well, which would change the equation. One can even add a variable, as I have done in some plates, just to independently set the point of origine of the sequence itself.

$$\frac{N_2+1}{N_1+1} = 1.42764$$

$N_1 = 2.75971$
$N_2 = 4.36750$

J = 1.42764
K = 2.03815
L = 2.90973
M = 4.15404
N = 5.93046

P = 0.70046
Q = 0.49064
R = 0.34367
S = 0.24073

$$\frac{N_2+1^{1}}{N_1+1} - J = 0.00000$$
$$\frac{N_2+1^{2}}{N_1+1} - K = 0.00000$$
$$\frac{N_2+1^{3}}{N_1+1} - L = 0.00000$$
$$\frac{N_2+1^{4}}{N_1+1} - M = 0.00000$$
$$\frac{N_2+1^{5}}{N_1+1} - N = 0.00000$$

$$\frac{N_2+1^{-1}}{N_1+1} - P = 0.00000$$
$$\frac{N_2+1^{-2}}{N_1+1} - Q = 0.00000$$
$$\frac{N_2+1^{-3}}{N_1+1} - R = 0.00000$$
$$\frac{N_2+1^{-4}}{N_1+1} - S = 0.00000$$

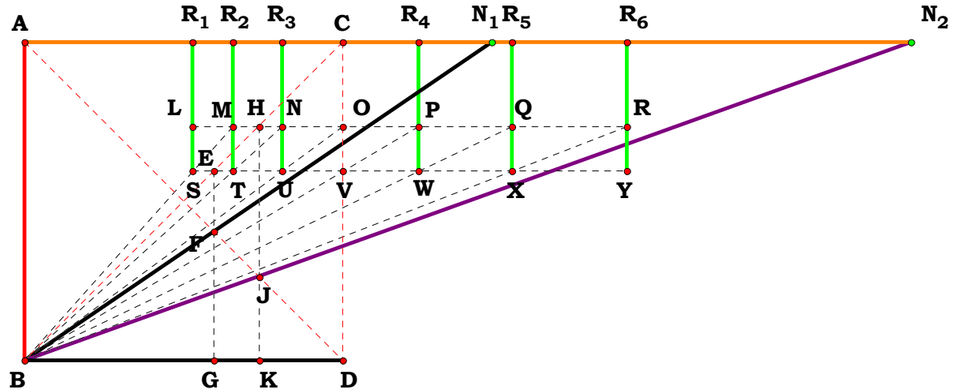
090912-3a

$AB := 1$

$N_1 := 1.46762$

$N_2 := 2.78261$

$N_1 = 1.46762$
$N_2 = 2.78261$
$R_1 = 0.52847$
$R_2 = 0.65365$
$R_3 = 0.80849$
$R_4 = 1.23688$
$R_5 = 1.52986$
$R_6 = 1.89225$



$$DG := \frac{1}{N_1 + 1} \qquad DK := \frac{1}{N_2 + 1}$$

$$DO := 1 - DK \qquad DV := 1 - DG$$

$$R_4 := \frac{1}{DV} \cdot DO \qquad R_5 := \frac{R_4}{DV} \cdot DO \qquad R_6 := \frac{R_5}{DV} \cdot DO$$

$$R_3 := \frac{1}{DO} \cdot DV \qquad R_2 := \frac{R_3}{DO} \cdot DV \qquad R_1 := \frac{R_2}{DO} \cdot DV$$

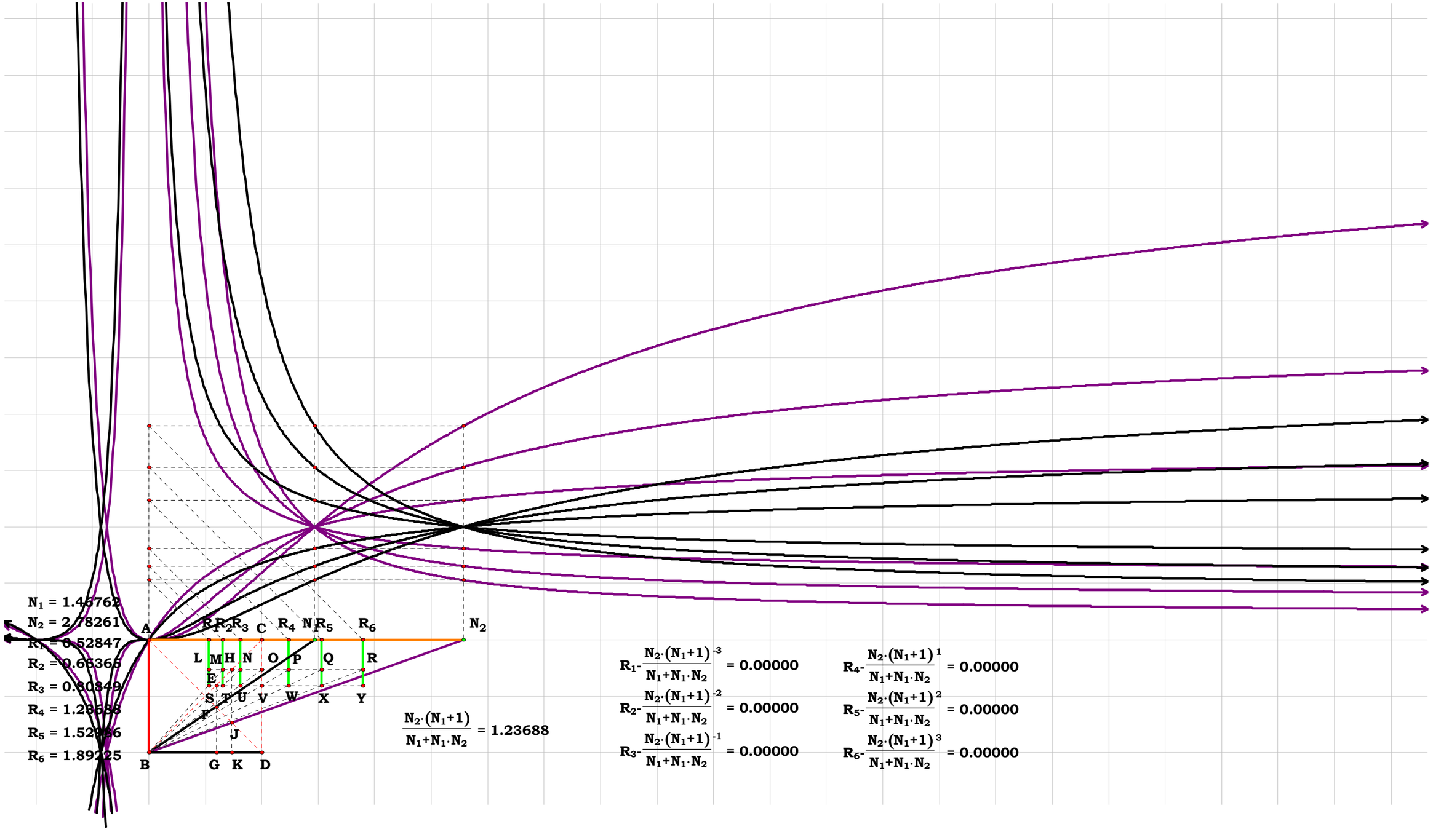
$$R_4 - \frac{N_2 \cdot (N_1 + 1)}{N_1 + N_1 \cdot N_2} = 0 \qquad R_5 - \frac{N_2^{\,2} \cdot (N_1 + 1)^2}{N_1^{\,2} \cdot (N_2 + 1)^2} = 0 \qquad R_6 - \frac{N_2^{\,3} \cdot (N_1 + 1)^3}{N_1^{\,3} \cdot (N_2 + 1)^3} = 0$$

$$R_3 - \frac{N_1 \cdot (N_2 + 1)}{N_2 + N_1 \cdot N_2} = 0 \qquad R_2 - \frac{N_1^{\,2} \cdot (N_2 + 1)^2}{N_2^{\,2} \cdot (N_1 + 1)^2} = 0 \qquad R_1 - \frac{N_1^{\,3} \cdot (N_2 + 1)^3}{N_2^{\,3} \cdot (N_1 + 1)^3} = 0$$

After reducing, reformating and reording:

$$R_1 - \left[\frac{N_2 \cdot (N_1 + 1)}{N_1 + N_1 \cdot N_2}\right]^{-3} = 0 \qquad R_2 - \left[\frac{N_2 \cdot (N_1 + 1)}{N_1 + N_1 \cdot N_2}\right]^{-2} = 0 \qquad R_3 - \left[\frac{N_2 \cdot (N_1 + 1)}{N_1 + N_1 \cdot N_2}\right]^{-1} = 0 \qquad AB - \left[\frac{N_2 \cdot (N_1 + 1)}{N_1 + N_1 \cdot N_2}\right]^{0} = 0$$

$$R_4 - \left[\frac{N_2 \cdot (N_1 + 1)}{N_1 + N_1 \cdot N_2}\right]^{1} = 0 \qquad R_5 - \left[\frac{N_2 \cdot (N_1 + 1)}{N_1 + N_1 \cdot N_2}\right]^{2} = 0 \qquad R_6 - \left[\frac{N_2 \cdot (N_1 + 1)}{N_1 + N_1 \cdot N_2}\right]^{3} = 0$$



N1 = 1.46762
N2 = 2.78261
R1 = 0.52847
R2 = 0.65365
R3 = 0.80849
R4 = 1.23688
R5 = 1.52986
R6 = 1.89225
A
B
C
D
E
F
G
H
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
R1 R2 R3 R4 N1 R5 R6
N2
N2·(N1+1) / (N1+N1·N2) = 1.23688
R1 - N2·(N1+1)^-3 / (N1+N1·N2) = 0.00000
R2 - N2·(N1+1)^-2 / (N1+N1·N2) = 0.00000
R3 - N2·(N1+1)^-1 / (N1+N1·N2) = 0.00000
R4 - N2·(N1+1)^1 / (N1+N1·N2) = 0.00000
R5 - N2·(N1+1)^2 / (N1+N1·N2) = 0.00000
R6 - N2·(N1+1)^3 / (N1+N1·N2) = 0.00000

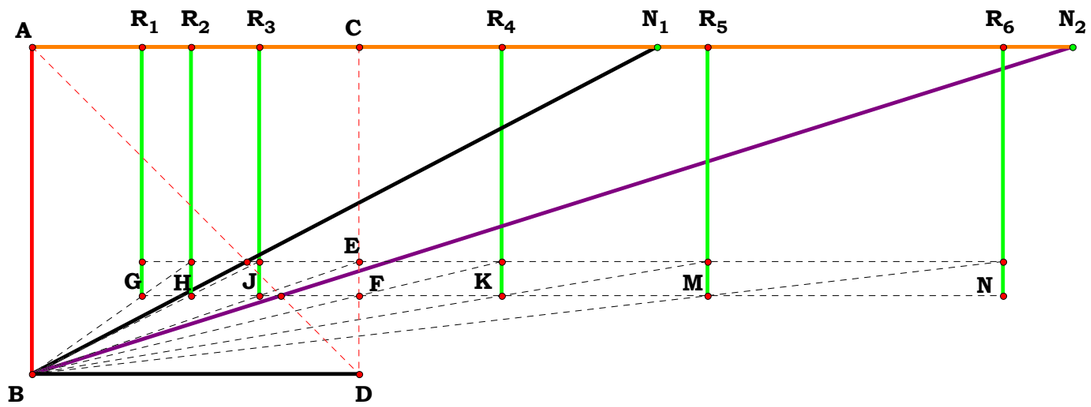
090912-3b

$AB := 1$

$N_1 := 1.90778$

$N_2 := 3.17746$

$N_1 = 1.90778$
$N_2 = 3.17746$
$R_1 = 0.33725$
$R_2 = 0.48451$
$R_3 = 0.69606$
$R_4 = 1.43665$
$R_5 = 2.06396$
$R_6 = 2.96518$



$$DE := \frac{1}{N_1 + 1} \qquad DF := \frac{1}{N_2 + 1}$$

$$R_4 := \frac{1}{DF} \cdot DE \qquad R_5 := \frac{R_4}{DF} \cdot DE \qquad R_6 := \frac{R_5}{DF} \cdot DE$$

$$R_3 := \frac{1}{DE} \cdot DF \qquad R_2 := \frac{R_3}{DE} \cdot DF \qquad R_1 := \frac{R_2}{DE} \cdot DF$$

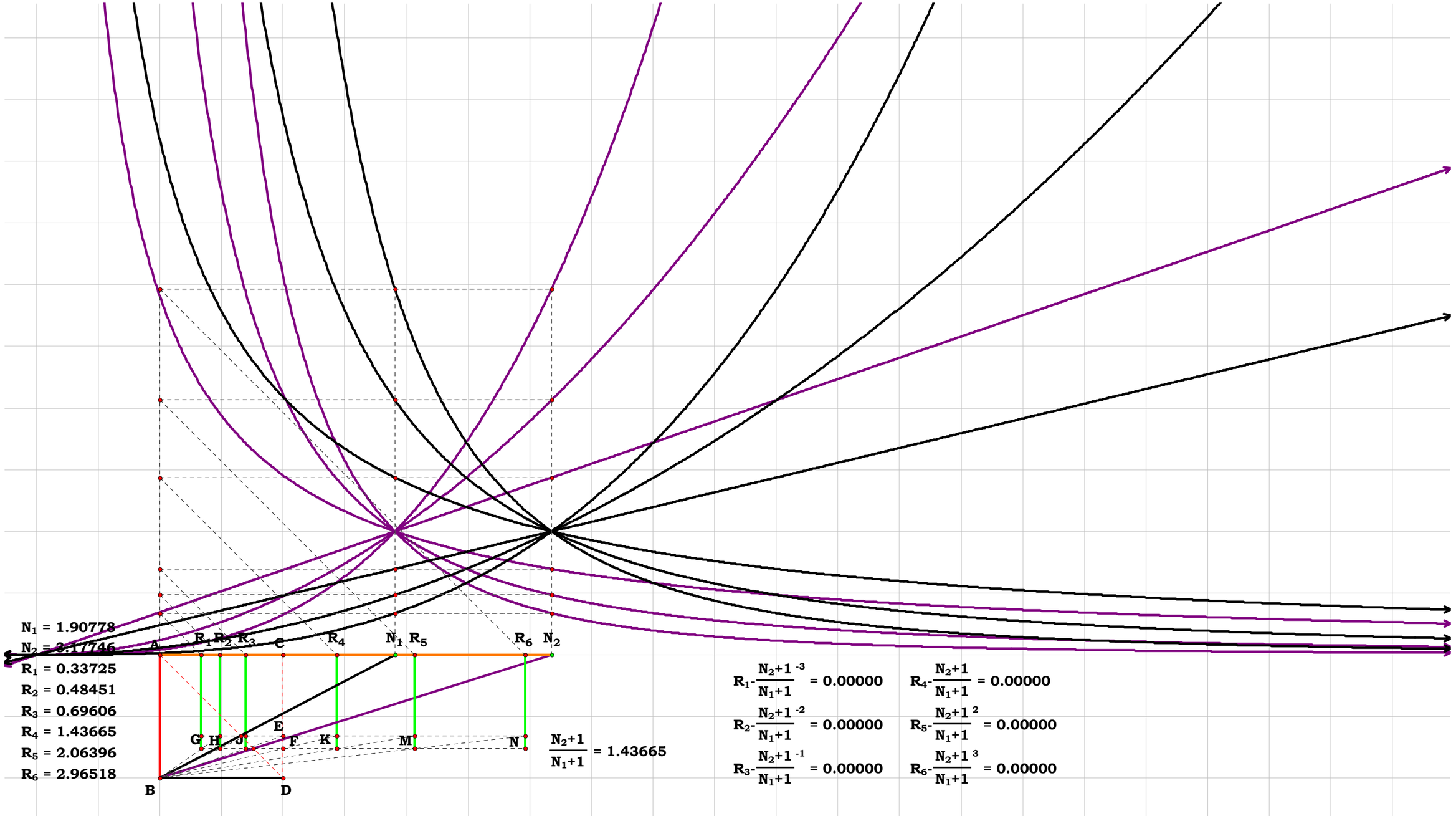
$$R_4 - \frac{N_2 + 1}{N_1 + 1} = 0 \qquad R_5 - \frac{(N_2 + 1)^2}{(N_1 + 1)^2} = 0 \qquad R_6 - \frac{(N_2 + 1)^3}{(N_1 + 1)^3} = 0$$

$$R_3 - \frac{N_1 + 1}{N_2 + 1} = 0 \qquad R_2 - \frac{(N_1 + 1)^2}{(N_2 + 1)^2} = 0 \qquad R_1 - \frac{(N_1 + 1)^3}{(N_2 + 1)^3} = 0$$

After reducing, reformating and reording:

$$R_1 - \left(\frac{N_2 + 1}{N_1 + 1}\right)^{-3} = 0 \qquad R_2 - \left(\frac{N_2 + 1}{N_1 + 1}\right)^{-2} = 0 \qquad R_3 - \left(\frac{N_2 + 1}{N_1 + 1}\right)^{-1} = 0 \qquad AB - \left(\frac{N_2 + 1}{N_1 + 1}\right)^{0} = 0$$

$$R_4 - \left(\frac{N_2 + 1}{N_1 + 1}\right)^{1} = 0 \qquad R_5 - \left[\frac{(N_2 + 1)}{(N_1 + 1)}\right]^{2} = 0 \qquad R_6 - \left[\frac{(N_2 + 1)}{(N_1 + 1)}\right]^{3} = 0$$


N1 = 1.90778
N2 = 3.17746
R1 = 0.33725
R2 = 0.48451
R3 = 0.69606
R4 = 1.43665
R5 = 2.06396
R6 = 2.96518
A
R1 R2 R3
C
R4
N1 R5
R6 N2
G H J E F K M N
B
D
(N2+1)/(N1+1) = 1.43665
R1-(N2+1)/(N1+1)^-3 = 0.00000
R2-(N2+1)/(N1+1)^-2 = 0.00000
R3-(N2+1)/(N1+1)^-1 = 0.00000
R4-(N2+1)/(N1+1) = 0.00000
R5-(N2+1)/(N1+1)^2 = 0.00000
R6-(N2+1)/(N1+1)^3 = 0.00000

090912-4

This is identical to the last figure, however, the series is going to start from the units other operational tail.

Looking at an exponential series, one would not think that it had a point of origin, however: In regard to the point of origin for any exponential series, one can, by viewing the waves of a series, find the starting points, or root of any series, or in short, if one knows two or more waves of an exponential series, one can figure out as much of the series as they like from its root; especially if the root is other than the point of origin. If one had two consecutive points of a series, one could simply place a square on it and draw the coversion to the origin and then use squares to plot each of the series, etc.

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2} = 0.83725$$

$$\frac{N_2\cdot(N_1+1)}{N_1\cdot N_2+N_1} = 1.12397$$

A = 0.83725
B = 0.94105
C = 1.05771
D = 1.18884
E = 1.33622

F = 0.74490
G = 0.66274
H = 0.58964
I = 0.52461

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{0}}{N_1\cdot N_2+N_1} \text{ -A} = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{1}}{N_1\cdot N_2+N_1} \text{ -B} = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{2}}{N_1\cdot N_2+N_1} \text{ -C} = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{3}}{N_1\cdot N_2+N_1} \text{ -D} = 0.00000$$

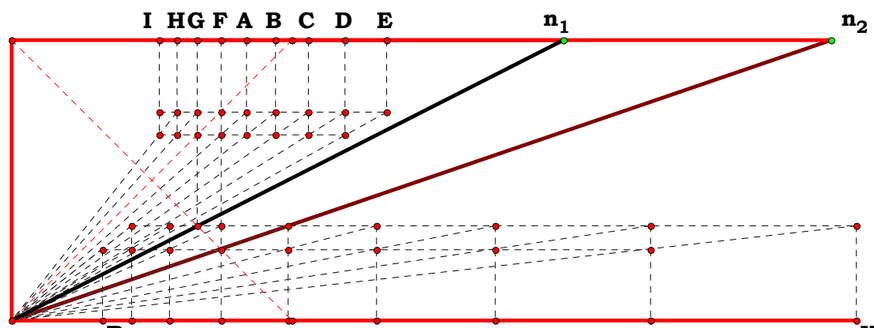
$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{4}}{N_1\cdot N_2+N_1} \text{ -E} = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-1}}{N_1\cdot N_2+N_1} \text{ -F} = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-2}}{N_1\cdot N_2+N_1} \text{ -G} = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-3}}{N_1\cdot N_2+N_1} \text{ -H} = 0.00000$$

$$\frac{N_2^2\cdot(N_1+1)}{N_1\cdot(N_2+1)^2}\cdot\frac{N_2\cdot(N_1+1)^{-4}}{N_1\cdot N_2+N_1} \text{ -I} = 0.00000$$



$$\frac{N_2}{N_1+1} = 0.98482$$

$$\frac{N_2+1}{N_1+1} = 1.32208$$

$N_1 = 1.96510$
$N_2 = 2.92011$

J = 0.98482
K = 1.30202
L = 1.72138
M = 2.27580
N = 3.00879

O = 0.74490
P = 0.56343
Q = 0.42617
R = 0.32235

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{\,0}}{N_1+1} \text{ -J} = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{\,1}}{N_1+1} \text{ -K} = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{\,2}}{N_1+1} \text{ -L} = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{\,3}}{N_1+1} \text{ -M} = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{\,4}}{N_1+1} \text{ -N} = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{\,-1}}{N_1+1} \text{ -O} = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{\,-2}}{N_1+1} \text{ -P} = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{\,-3}}{N_1+1} \text{ -Q} = 0.00000$$

$$\frac{N_2}{N_1+1}\cdot\frac{N_2+1^{\,-4}}{N_1+1} \text{ -R} = 0.00000$$

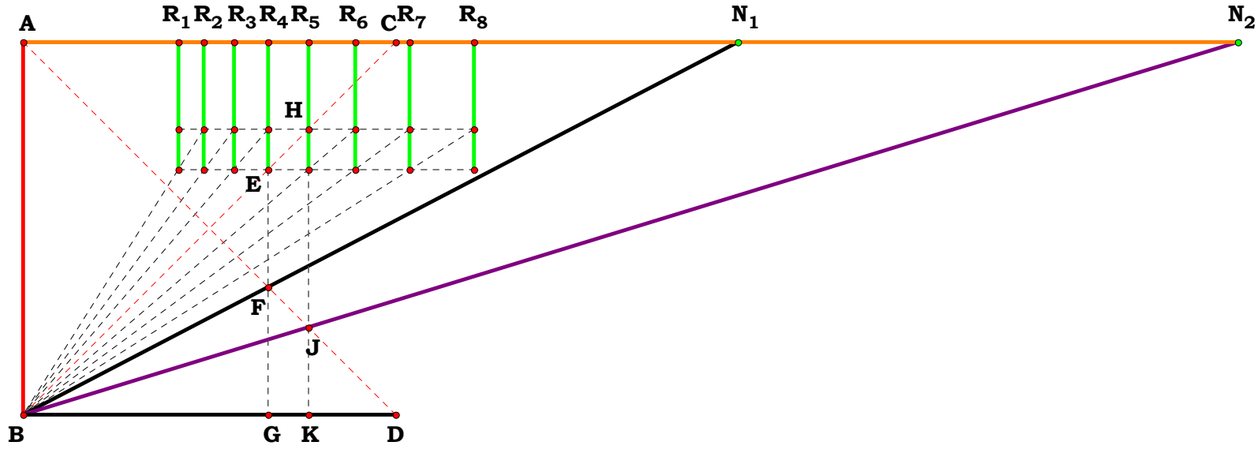
090912-4A

$AB := 1$

$N_1 := 1.91766$

$N_2 := 3.25942$

$N_1 = 1.91766$
$N_2 = 3.25942$
$R_1 = 0.41646$
$R_2 = 0.48488$
$R_3 = 0.56453$
$R_4 = 0.65726$
$R_5 = 0.76523$
$R_6 = 0.89093$
$R_7 = 1.03728$
$R_8 = 1.20767$



$EG := 1 - \frac{1}{N_1 + 1}$ $HK := 1 - \frac{1}{N_2 + 1}$

$R_4 := EG$ $R_5 := HK$

$R_6 := \frac{R_5}{EG} \cdot HK$ $R_7 := \frac{R_6}{EG} \cdot HK$ $R_8 := \frac{R_7}{EG} \cdot HK$

$R_3 := \frac{R_4}{HK} \cdot EG$ $R_2 := \frac{R_3}{HK} \cdot EG$ $R_1 := \frac{R_2}{HK} \cdot EG$

$R_4 - \frac{N_1}{N_1 + 1} = 0$ $R_5 - \frac{N_2}{N_2 + 1} = 0$ $\frac{HK}{EG} - \frac{N_2 \cdot (N_1 + 1)}{N_1 \cdot (N_2 + 1)} = 0$ $\frac{N_1}{N_1 + 1} \cdot \frac{N_2 \cdot (N_1 + 1)}{N_1 \cdot (N_2 + 1)} = 0.765226$

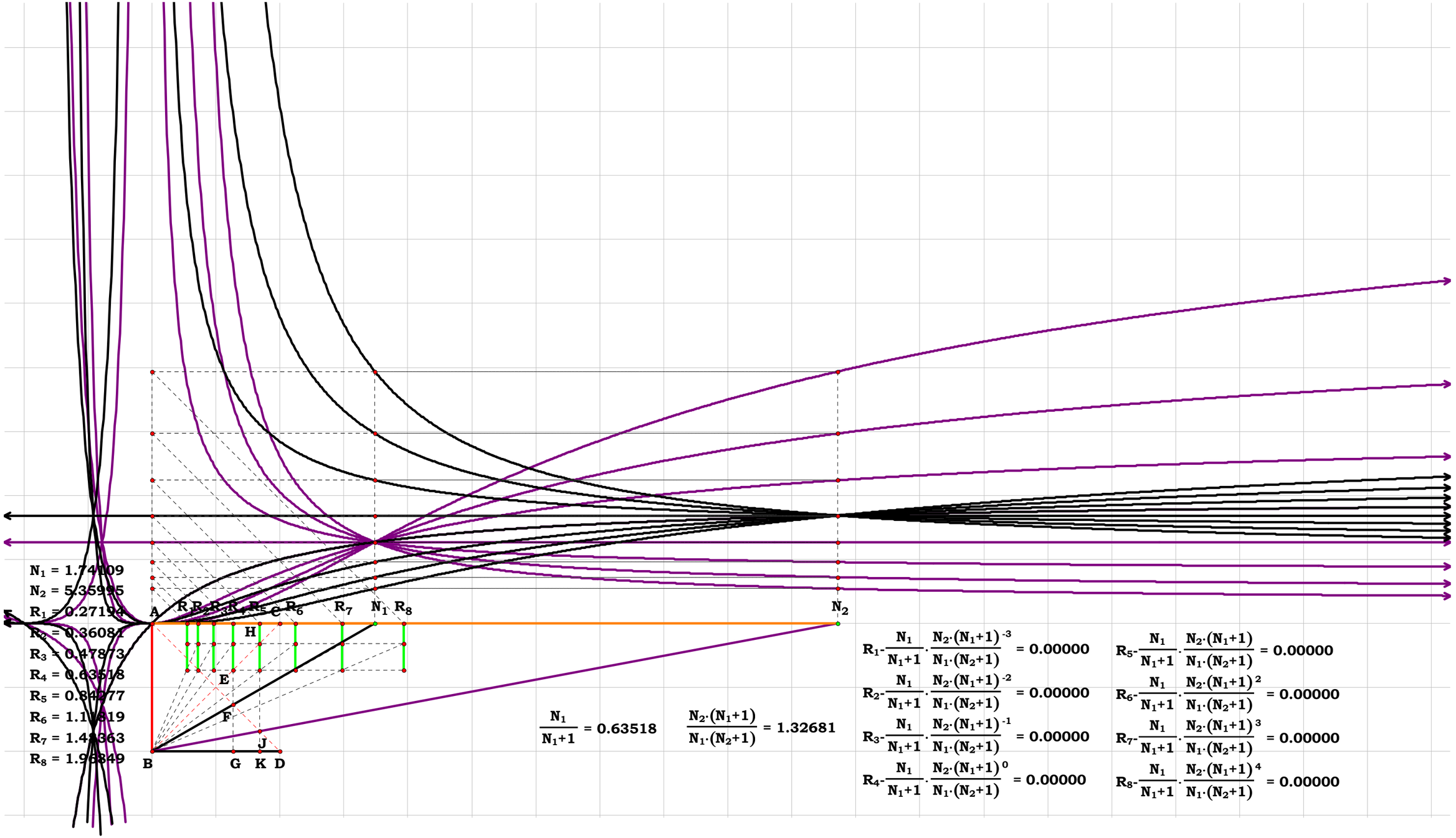
One might make an argument that every series should comprise two distinct parts, one, the starting point of the series, and the other the index, as in the following. I would imagine that such an arrangement would make series a whole lot easier to work with.

$R_1 - \frac{N_1}{N_1 + 1} \cdot \left[\frac{N_2 \cdot (N_1 + 1)}{N_1 \cdot (N_2 + 1)}\right]^{-3} = 0$ $R_2 - \frac{N_1}{N_1 + 1} \cdot \left[\frac{N_2 \cdot (N_1 + 1)}{N_1 \cdot (N_2 + 1)}\right]^{-2} = 0$ $R_3 - \frac{N_1}{N_1 + 1} \cdot \left[\frac{N_2 \cdot (N_1 + 1)}{N_1 \cdot (N_2 + 1)}\right]^{-1} = 0$

$R_4 - \frac{N_1}{N_1 + 1} \cdot \left[\frac{N_2 \cdot (N_1 + 1)}{N_1 \cdot (N_2 + 1)}\right]^{0} = 0$ $R_5 - \frac{N_1}{N_1 + 1} \cdot \frac{N_2 \cdot (N_1 + 1)}{N_1 \cdot (N_2 + 1)} = 0$ $\frac{N_1}{N_1 + 1} \cdot \frac{N_2 \cdot (N_1 + 1)}{N_1 \cdot (N_2 + 1)} = 0.765226$

$R_6 - \frac{N_1}{N_1 + 1} \cdot \left[\frac{N_2 \cdot (N_1 + 1)}{N_1 \cdot (N_2 + 1)}\right]^{2} = 0$ $R_7 - \frac{N_1}{N_1 + 1} \cdot \left[\frac{N_2 \cdot (N_1 + 1)}{N_1 \cdot (N_2 + 1)}\right]^{3} = 0$ $R_8 - \frac{N_1}{N_1 + 1} \cdot \left[\frac{N_2 \cdot (N_1 + 1)}{N_1 \cdot (N_2 + 1)}\right]^{4} = 0$

$R_1 = 0.416465$ $R_5 = 0.765226$
$R_2 = 0.484876$ $R_6 = 0.890928$
$R_3 = 0.564526$ $R_7 = 1.037279$
$R_4 = 0.65726$ $R_8 = 1.207671$



$$\frac{N_1}{N_1+1} = 0.63518 \qquad \frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)} = 1.32681$$

$$R_1\text{-}\frac{N_1}{N_1+1}\cdot\frac{N_2\cdot(N_1+1)^{-3}}{N_1\cdot(N_2+1)} = 0.00000 \qquad R_5\text{-}\frac{N_1}{N_1+1}\cdot\frac{N_2\cdot(N_1+1)}{N_1\cdot(N_2+1)} = 0.00000$$

$$R_2\text{-}\frac{N_1}{N_1+1}\cdot\frac{N_2\cdot(N_1+1)^{-2}}{N_1\cdot(N_2+1)} = 0.00000 \qquad R_6\text{-}\frac{N_1}{N_1+1}\cdot\frac{N_2\cdot(N_1+1)^{2}}{N_1\cdot(N_2+1)} = 0.00000$$

$$R_3\text{-}\frac{N_1}{N_1+1}\cdot\frac{N_2\cdot(N_1+1)^{-1}}{N_1\cdot(N_2+1)} = 0.00000 \qquad R_7\text{-}\frac{N_1}{N_1+1}\cdot\frac{N_2\cdot(N_1+1)^{3}}{N_1\cdot(N_2+1)} = 0.00000$$

$$R_4\text{-}\frac{N_1}{N_1+1}\cdot\frac{N_2\cdot(N_1+1)^{0}}{N_1\cdot(N_2+1)} = 0.00000 \qquad R_8\text{-}\frac{N_1}{N_1+1}\cdot\frac{N_2\cdot(N_1+1)^{4}}{N_1\cdot(N_2+1)} = 0.00000$$

090912-4B

$AB := 1$

$N_1 := 1.62767$

$N_2 := 2.83274$

$FH := \frac{1}{N_1 + 1}$ $GH := \frac{1}{N_2 + 1}$ $R_5 := 1 - GH$

$R_6 := \frac{R_5}{GH} \cdot FH$ $R_7 := \frac{R_6}{GH} \cdot FH$ $R_8 := \frac{R_7}{GH} \cdot FH$

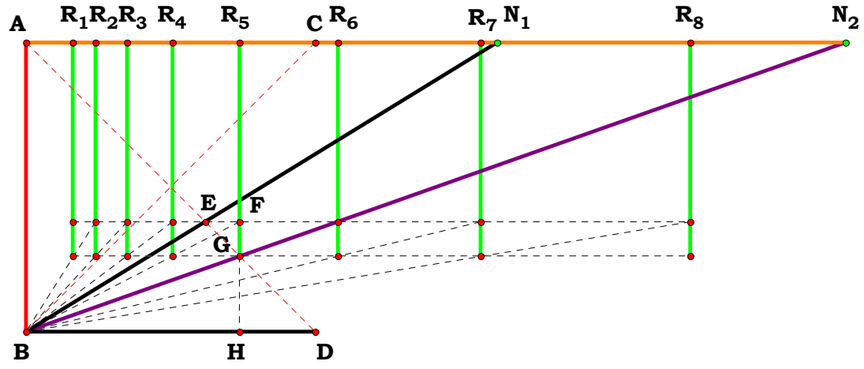
$R_4 := \frac{R_5}{FH} \cdot GH$ $R_3 := \frac{R_4}{FH} \cdot GH$ $R_2 := \frac{R_3}{FH} \cdot GH$ $R_1 := \frac{R_2}{FH} \cdot GH$

$R_5 - \frac{N_2}{N_2 + 1} = 0$ $\frac{FH}{GH} - \frac{N_2 + 1}{N_1 + 1} = 0$

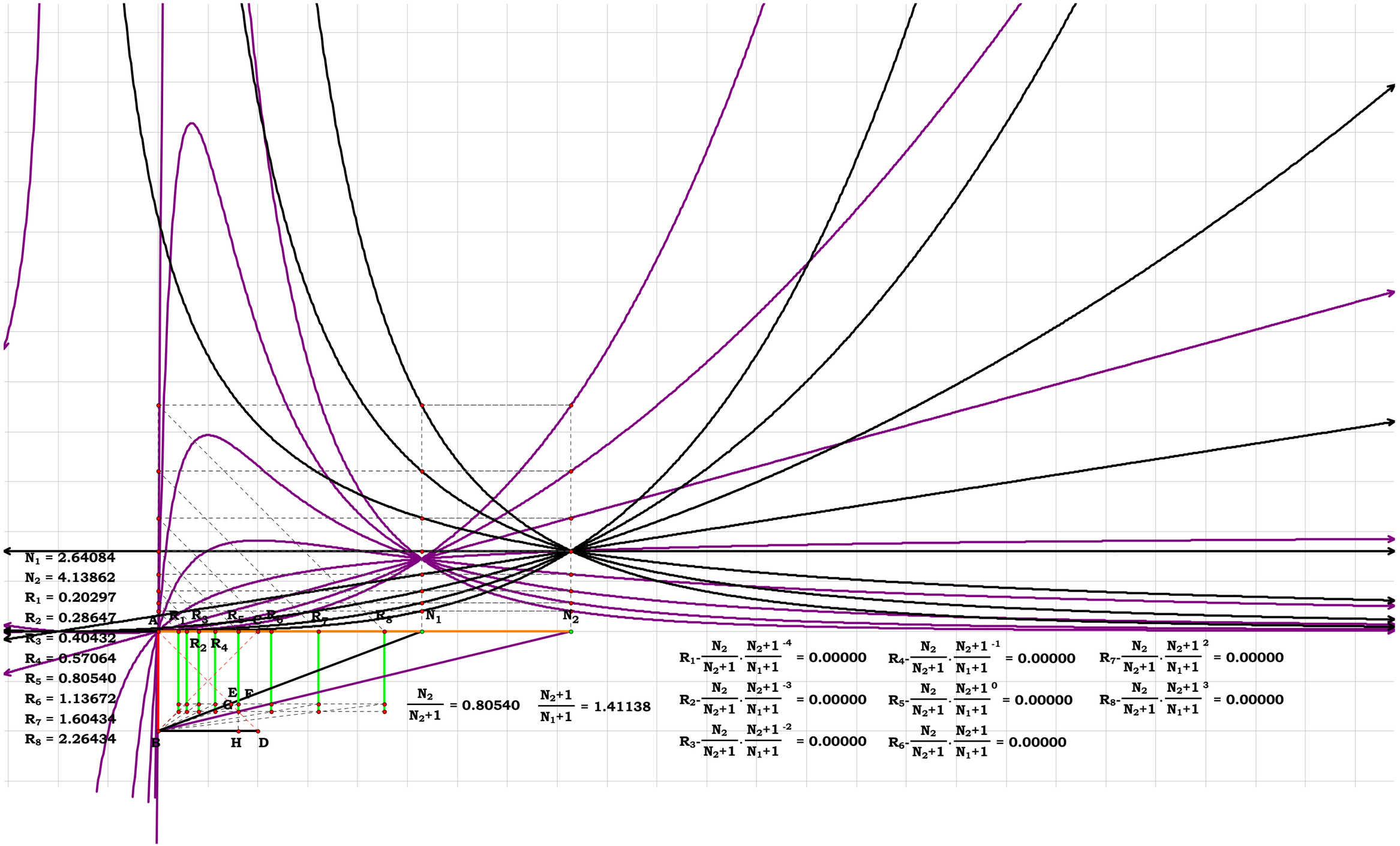
$R_1 - \frac{N_2}{N_2 + 1} \cdot \left(\frac{N_2 + 1}{N_1 + 1}\right)^{-4} = 0$ $R_2 - \frac{N_2}{N_2 + 1} \cdot \left(\frac{N_2 + 1}{N_1 + 1}\right)^{-3} = 0$ $R_3 - \frac{N_2}{N_2 + 1} \cdot \left(\frac{N_2 + 1}{N_1 + 1}\right)^{-2} = 0$ $R_4 - \frac{N_2}{N_2 + 1} \cdot \left(\frac{N_2 + 1}{N_1 + 1}\right)^{-1} = 0$

$R_5 - \frac{N_2}{N_2 + 1} \cdot \left(\frac{N_2 + 1}{N_1 + 1}\right)^{0} = 0$ $R_6 - \frac{N_2}{N_2 + 1} \cdot \left(\frac{N_2 + 1}{N_1 + 1}\right)^{1} = 0$ $R_7 - \frac{N_2}{N_2 + 1} \cdot \left(\frac{N_2 + 1}{N_1 + 1}\right)^{2} = 0$ $R_8 - \frac{N_2}{N_2 + 1} \cdot \left(\frac{N_2 + 1}{N_1 + 1}\right)^{3} = 0$

$N_1 = 1.62767$
$N_2 = 2.83274$
$R_1 = 0.16328$
$R_2 = 0.23817$
$R_3 = 0.34739$
$R_4 = 0.50671$
$R_5 = 0.73909$
$R_6 = 1.07805$
$R_7 = 1.57245$
$R_8 = 2.29359$



$R_1 = 0.163284$
$R_2 = 0.238167$
$R_3 = 0.347392$
$R_4 = 0.506709$
$R_5 = 0.73909$
$R_6 = 1.078043$
$R_7 = 1.572441$
$R_8 = 2.293575$


N_1 = 2.64084
N_2 = 4.13862
R_1 = 0.20297
R_2 = 0.28647
R_3 = 0.40432
R_4 = 0.57064
R_5 = 0.80540
R_6 = 1.13672
R_7 = 1.60434
R_8 = 2.26434
A
B
C
D
E
F
G
H
$\frac{N_2}{N_2+1}$ = 0.80540
$\frac{N_2+1}{N_1+1}$ = 1.41138
R_1-$\frac{N_2}{N_2+1}\cdot\frac{N_2+1}{N_1+1}^{-4}$ = 0.00000
R_2-$\frac{N_2}{N_2+1}\cdot\frac{N_2+1}{N_1+1}^{-3}$ = 0.00000
R_3-$\frac{N_2}{N_2+1}\cdot\frac{N_2+1}{N_1+1}^{-2}$ = 0.00000
R_4-$\frac{N_2}{N_2+1}\cdot\frac{N_2+1}{N_1+1}^{-1}$ = 0.00000
R_5-$\frac{N_2}{N_2+1}\cdot\frac{N_2+1}{N_1+1}^{0}$ = 0.00000
R_6-$\frac{N_2}{N_2+1}\cdot\frac{N_2+1}{N_1+1}$ = 0.00000
R_7-$\frac{N_2}{N_2+1}\cdot\frac{N_2+1}{N_1+1}^{2}$ = 0.00000
R_8-$\frac{N_2}{N_2+1}\cdot\frac{N_2+1}{N_1+1}^{3}$ = 0.00000

090912-5

B = 1.31080
C = 1.71820
D = 2.25222
E = 2.95221
F = 3.86977
G = 5.07250

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)} = 1.31080$$

$$\frac{N_1\cdot(N_2-1)^2}{N_2\cdot(N_1-1)} = 1.71820$$

$$\frac{N_1\cdot(N_2-1)^3}{N_2\cdot(N_1-1)} = 2.25222$$

$$\frac{N_1\cdot(N_2-1)^4}{N_2\cdot(N_1-1)} = 2.95221$$

$$\frac{N_1\cdot(N_2-1)^5}{N_2\cdot(N_1-1)} = 3.86977$$

$$\frac{N_1\cdot(N_2-1)^6}{N_2\cdot(N_1-1)} = 5.07250$$

$$\frac{N_1\cdot(N_2-1)^1}{N_2\cdot(N_1-1)} - B = 0.00000$$

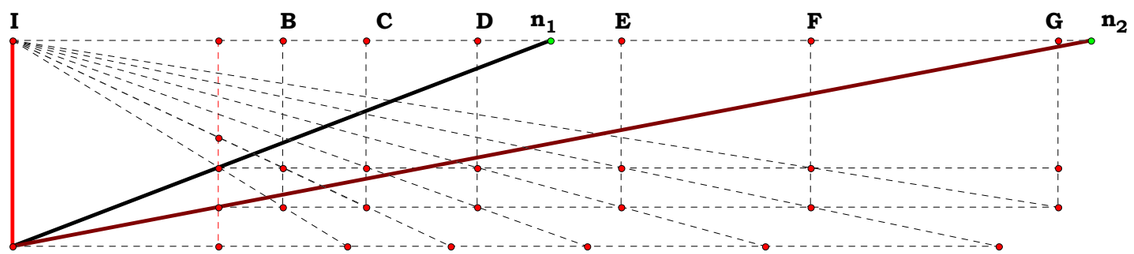
$$\frac{N_1\cdot(N_2-1)^2}{N_2\cdot(N_1-1)} - C = 0.00000$$

$$\frac{N_1\cdot(N_2-1)^3}{N_2\cdot(N_1-1)} - D = 0.00000$$

$$\frac{N_1\cdot(N_2-1)^4}{N_2\cdot(N_1-1)} - E = 0.00000$$

$$\frac{N_1\cdot(N_2-1)^5}{N_2\cdot(N_1-1)} - F = 0.00000$$

$$\frac{N_1\cdot(N_2-1)^6}{N_2\cdot(N_1-1)} - G = 0.00000$$



$$\frac{N_1}{N_1-1} - A = 0.00000$$

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2} = 2.12423$$

N_1 = 2.61146
N_2 = 5.23175

A = 1.62056
H = 2.12423
L = 2.78444
M = 3.64985
N = 4.78423

A

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)^{-1}}{N_2\cdot(N_1-1)} = 1.62056$$

H

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)^0}{N_2\cdot(N_1-1)} = 2.12423$$

L

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)^1}{N_2\cdot(N_1-1)} = 2.78444$$

M

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)^2}{N_2\cdot(N_1-1)} = 3.64985$$

N

$$\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)^3}{N_2\cdot(N_1-1)} = 4.78423$$

$$\left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)^{-1}}{N_2\cdot(N_1-1)}\right) - A = 0.00000$$

$$\left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)^0}{N_2\cdot(N_1-1)}\right) - H = 0.00000$$

$$\left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)^1}{N_2\cdot(N_1-1)}\right) - L = 0.00000$$

$$\left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)^2}{N_2\cdot(N_1-1)}\right) - M = 0.00000$$

$$\left(\frac{N_1^2\cdot(N_2-1)}{N_2\cdot(N_1-1)^2}\cdot\frac{N_1\cdot(N_2-1)^3}{N_2\cdot(N_1-1)}\right) - N = 0.00000$$

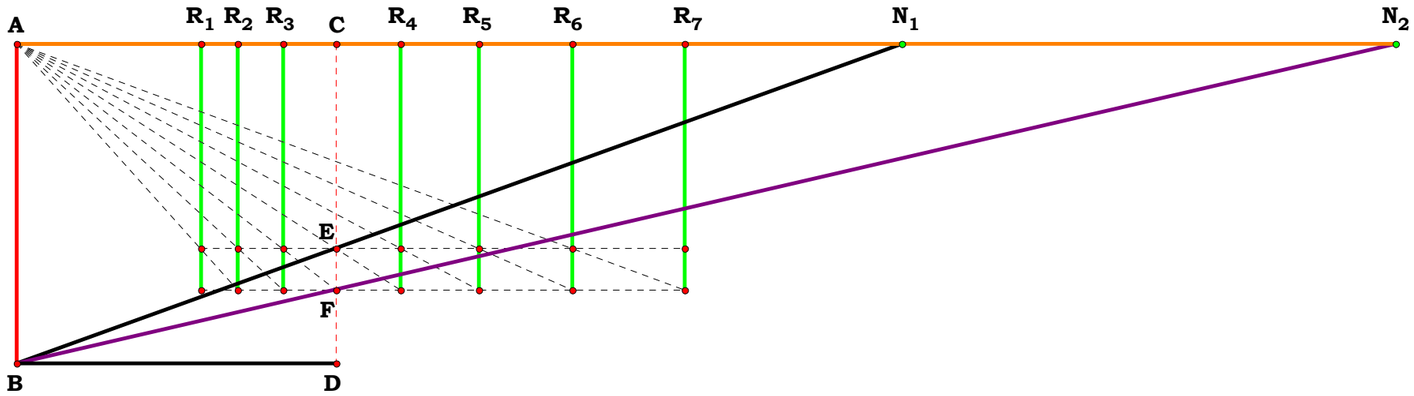
090912-5a

$AB := 1$

$N_1 := 2.76966$

$N_2 := 4.31164$

$N_1 = 2.76966$
$N_2 = 4.31164$
$R_1 = 0.57569$
$R_2 = 0.69203$
$R_3 = 0.83188$
$R_4 = 1.20209$
$R_5 = 1.44502$
$R_6 = 1.73705$
$R_7 = 2.08809$



$DE := \frac{1}{N_1}$ $DF := \frac{1}{N_2}$

$R_3 := \frac{1}{1-DF} \cdot (1-DE)$ $R_4 := \frac{1}{1-DE} \cdot (1-DF)$

$R_2 := \frac{R_3}{1-DF} \cdot (1-DE)$ $R_1 := \frac{R_2}{1-DF} \cdot (1-DE)$

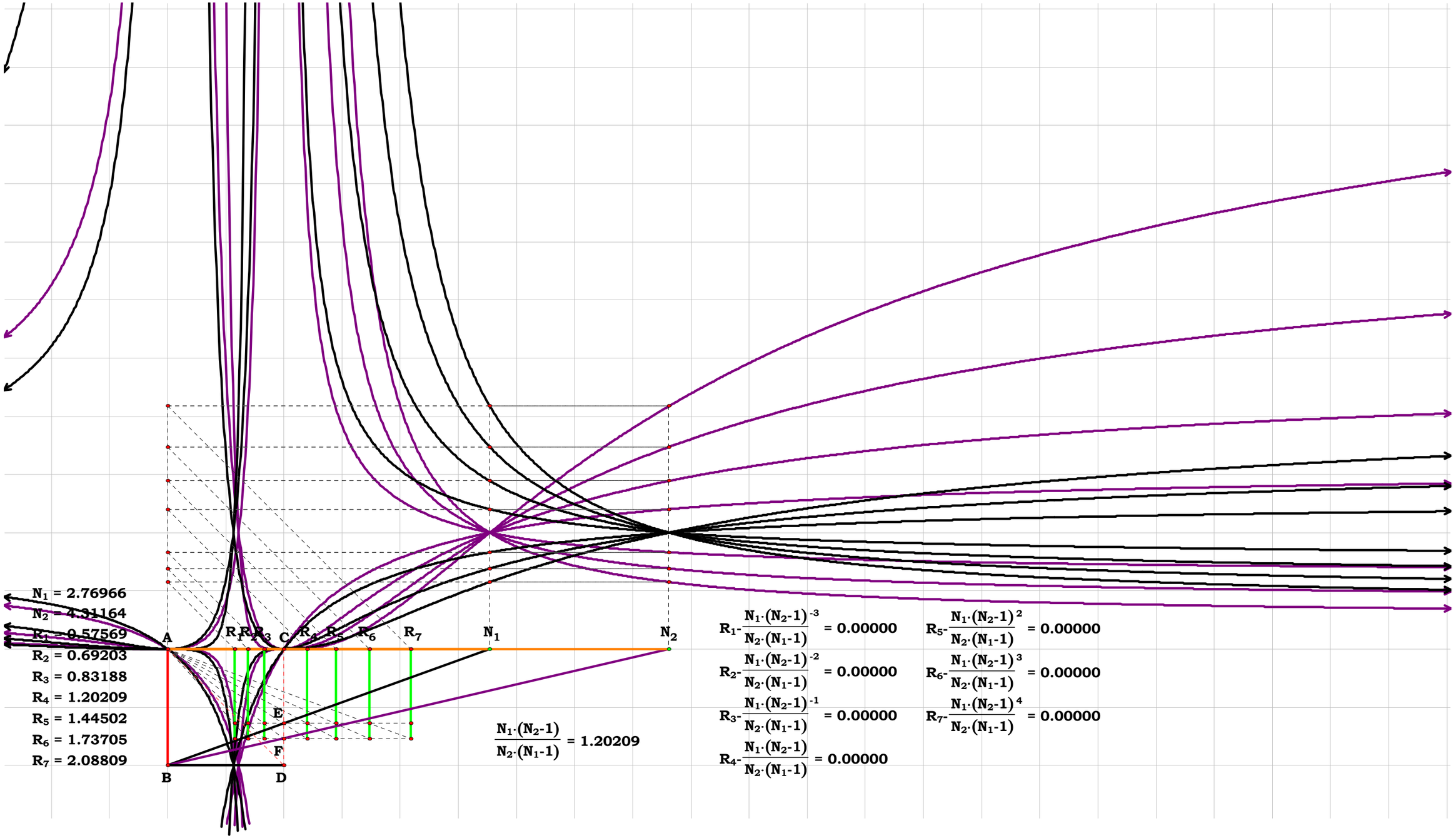
$R_5 := \frac{R_4}{1-DE} \cdot (1-DF)$ $R_6 := \frac{R_5}{1-DE} \cdot (1-DF)$ $R_7 := \frac{R_6}{1-DE} \cdot (1-DF)$

$R_1 = 0.575689$ $R_5 = 1.445022$
$R_2 = 0.692031$ $R_6 = 1.737048$
$R_3 = 0.831884$ $R_7 = 2.088089$
$R_4 = 1.202091$

$$R_4 - \frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)} = 0$$

$$R_1 - \left[\frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)}\right]^{-3} = 0 \quad R_2 - \left[\frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)}\right]^{-2} = 0 \quad R_3 - \left[\frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)}\right]^{-1} = 0 \quad AB - \left[\frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)}\right]^{0} = 0$$

$$R_4 - \left[\frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)}\right]^{1} = 0 \quad R_5 - \left[\frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)}\right]^{2} = 0 \quad R_6 - \left[\frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)}\right]^{3} = 0 \quad R_7 - \left[\frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)}\right]^{4} = 0$$



N_1 = 2.76966
N_2 = 4.31164
R_1 = 0.57569
R_2 = 0.69203
R_3 = 0.83188
R_4 = 1.20209
R_5 = 1.44502
R_6 = 1.73705
R_7 = 2.08809

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)} = 1.20209$$

$$R_1\text{-}\frac{N_1\cdot(N_2-1)^{-3}}{N_2\cdot(N_1-1)} = 0.00000 \qquad R_5\text{-}\frac{N_1\cdot(N_2-1)^{2}}{N_2\cdot(N_1-1)} = 0.00000$$

$$R_2\text{-}\frac{N_1\cdot(N_2-1)^{-2}}{N_2\cdot(N_1-1)} = 0.00000 \qquad R_6\text{-}\frac{N_1\cdot(N_2-1)^{3}}{N_2\cdot(N_1-1)} = 0.00000$$

$$R_3\text{-}\frac{N_1\cdot(N_2-1)^{-1}}{N_2\cdot(N_1-1)} = 0.00000 \qquad R_7\text{-}\frac{N_1\cdot(N_2-1)^{4}}{N_2\cdot(N_1-1)} = 0.00000$$

$$R_4\text{-}\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)} = 0.00000$$

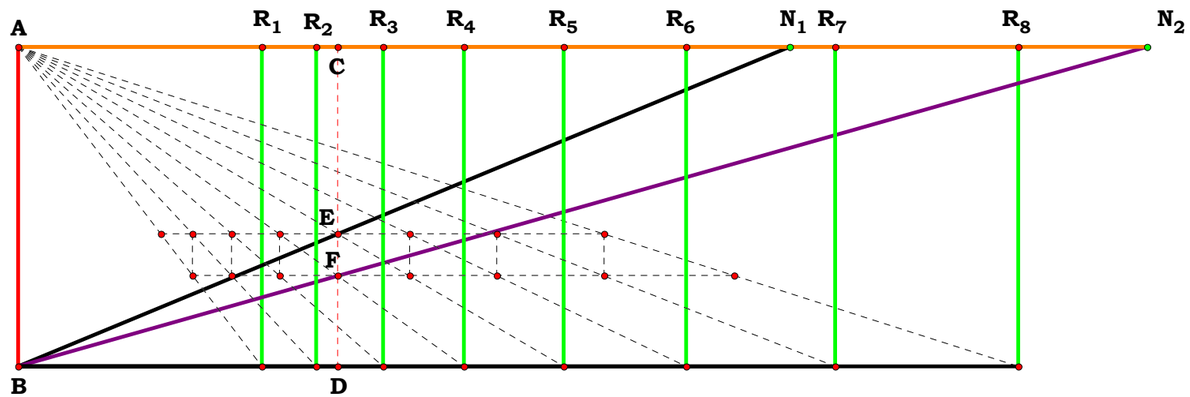
090912-5a

$AB := 1$

$N_1 := 2.41427$

$N_2 := 3.52979$

$N_1 = 2.41427$
$N_2 = 3.52979$
$R_1 = 0.76190$
$R_2 = 0.93215$
$R_3 = 1.14045$
$R_4 = 1.39529$
$R_5 = 1.70708$
$R_6 = 2.08854$
$R_7 = 2.55523$
$R_8 = 3.12622$



$$DE := \frac{1}{N_1} \qquad DF := \frac{1}{N_2} \qquad R_4 := \frac{1}{1 - DF} \qquad R_5 := \frac{1}{1 - DE}$$

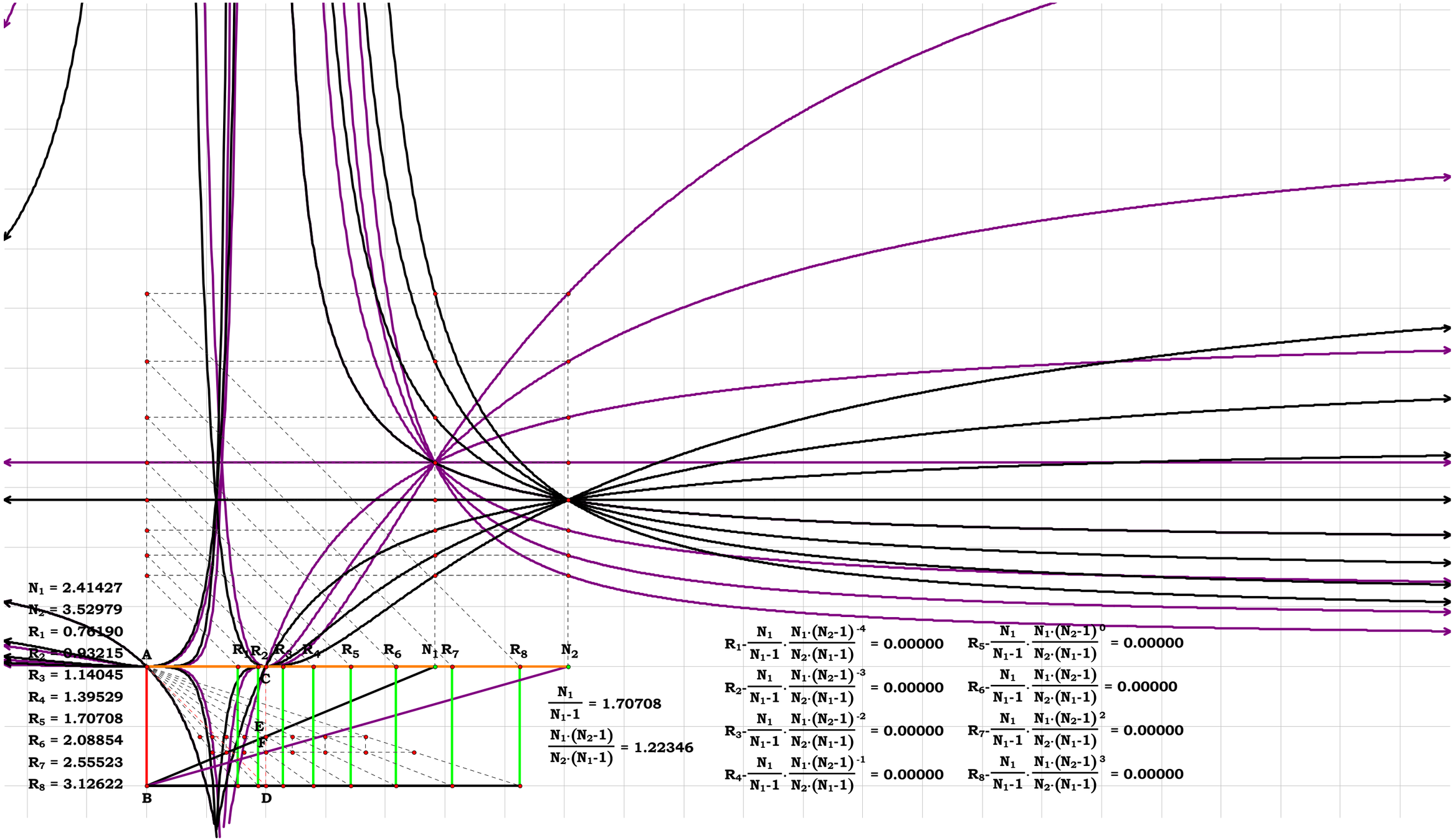
$$R_3 := \frac{R_4 \cdot (1 - DE)}{1 - DF} \qquad R_2 := \frac{R_3 \cdot (1 - DE)}{1 - DF} \qquad R_1 := \frac{R_2 \cdot (1 - DE)}{1 - DF}$$

$$R_6 := \frac{R_5 \cdot (1 - DF)}{1 - DE} \qquad R_7 := \frac{R_6 \cdot (1 - DF)}{1 - DE} \qquad R_8 := \frac{R_7 \cdot (1 - DF)}{1 - DE}$$

$$\frac{1 - DF}{1 - DE} - \frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)} = 0$$

$$R_1 - \frac{N_1}{N_1 - 1} \cdot \left[\frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)} \right]^{-4} = 0 \qquad R_2 - \frac{N_1}{N_1 - 1} \cdot \left[\frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)} \right]^{-3} = 0 \qquad R_3 - \frac{N_1}{N_1 - 1} \cdot \left[\frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)} \right]^{-2} = 0 \qquad R_4 - \frac{N_1}{N_1 - 1} \cdot \left[\frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)} \right]^{-1} = 0$$

$$R_5 - \frac{N_1}{N_1 - 1} \cdot \left[\frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)} \right]^{0} = 0 \qquad R_6 - \frac{N_1}{N_1 - 1} \cdot \left[\frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)} \right]^{1} = 0 \qquad R_7 - \frac{N_1}{N_1 - 1} \cdot \left[\frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)} \right]^{2} = 0 \qquad R_8 - \frac{N_1}{N_1 - 1} \cdot \left[\frac{N_1 \cdot (N_2 - 1)}{N_2 \cdot (N_1 - 1)} \right]^{3} = 0$$



$N_1 = 2.41427$
$N_2 = 3.52979$
$R_1 = 0.76190$
$R_2 = 0.93215$
$R_3 = 1.14045$
$R_4 = 1.39529$
$R_5 = 1.70708$
$R_6 = 2.08854$
$R_7 = 2.55523$
$R_8 = 3.12622$

$$\frac{N_1}{N_1-1} = 1.70708$$

$$\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)} = 1.22346$$

$$R_1\text{-}\frac{N_1}{N_1-1}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{-4} = 0.00000 \qquad R_5\text{-}\frac{N_1}{N_1-1}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{0} = 0.00000$$

$$R_2\text{-}\frac{N_1}{N_1-1}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{-3} = 0.00000 \qquad R_6\text{-}\frac{N_1}{N_1-1}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)} = 0.00000$$

$$R_3\text{-}\frac{N_1}{N_1-1}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{-2} = 0.00000 \qquad R_7\text{-}\frac{N_1}{N_1-1}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{2} = 0.00000$$

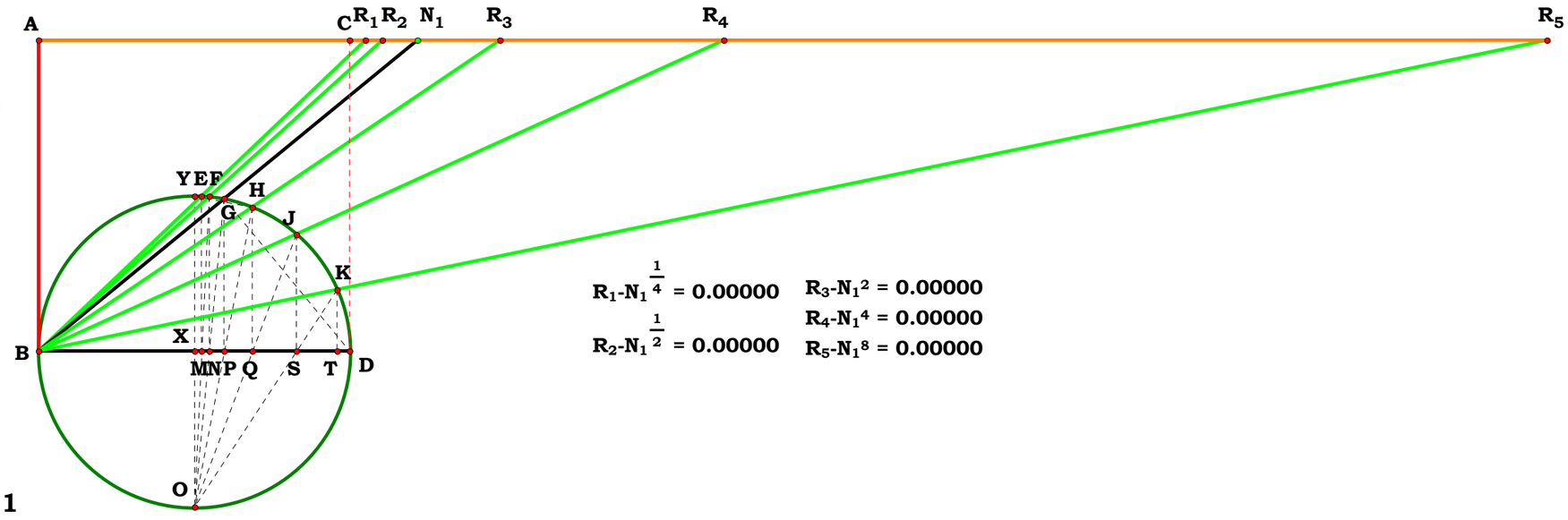
$$R_4\text{-}\frac{N_1}{N_1-1}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{-1} = 0.00000 \qquad R_8\text{-}\frac{N_1}{N_1-1}\cdot\frac{N_1\cdot(N_2-1)}{N_2\cdot(N_1-1)}^{3} = 0.00000$$

090912-6

One of the original methods I learned of doing exponential progression was by using what I call the unit circle. In this plate, I simply add the two figures together. I will do the exponential divisions in the unit circle.

One might consider, how the figures add together effortlessly when they are conceived of correctly. The unit circle, and the unit square, and the unit line, all work together using the same language, each depend simply upon the recursion of the unit, as does all of the language.

$N_1 = 1.21811$
$R_1 = 1.05056$
$R_2 = 1.10368$
$R_3 = 1.48380$
$R_4 = 2.20166$
$R_5 = 4.84731$



$R_1 - N_1^{\frac{1}{4}} = 0.00000$ $R_3 - N_1^{2} = 0.00000$
$R_4 - N_1^{4} = 0.00000$
$R_2 - N_1^{\frac{1}{2}} = 0.00000$ $R_5 - N_1^{8} = 0.00000$

$AB := 1$

$N_1 := 1.21811$

$BN_1 := \sqrt{AB^2 + N_1^2}$ $BG := \frac{N_1}{BN_1}$ $BP := N_1 \cdot \frac{BG}{BN_1}$ $OX := \frac{AB}{2}$

$MP := BP - OX$ $OP := \sqrt{OX^2 + MP^2}$ $OH := \frac{OX \cdot AB}{OP}$ $PH := OH - OP$

$PQ := \frac{MP \cdot PH}{OP}$ $BQ := OX + MP + PQ$ $HQ := \sqrt{BQ \cdot (AB - BQ)}$

$R_3 := \frac{BQ}{HQ}$ $R_3 = 1.483792$

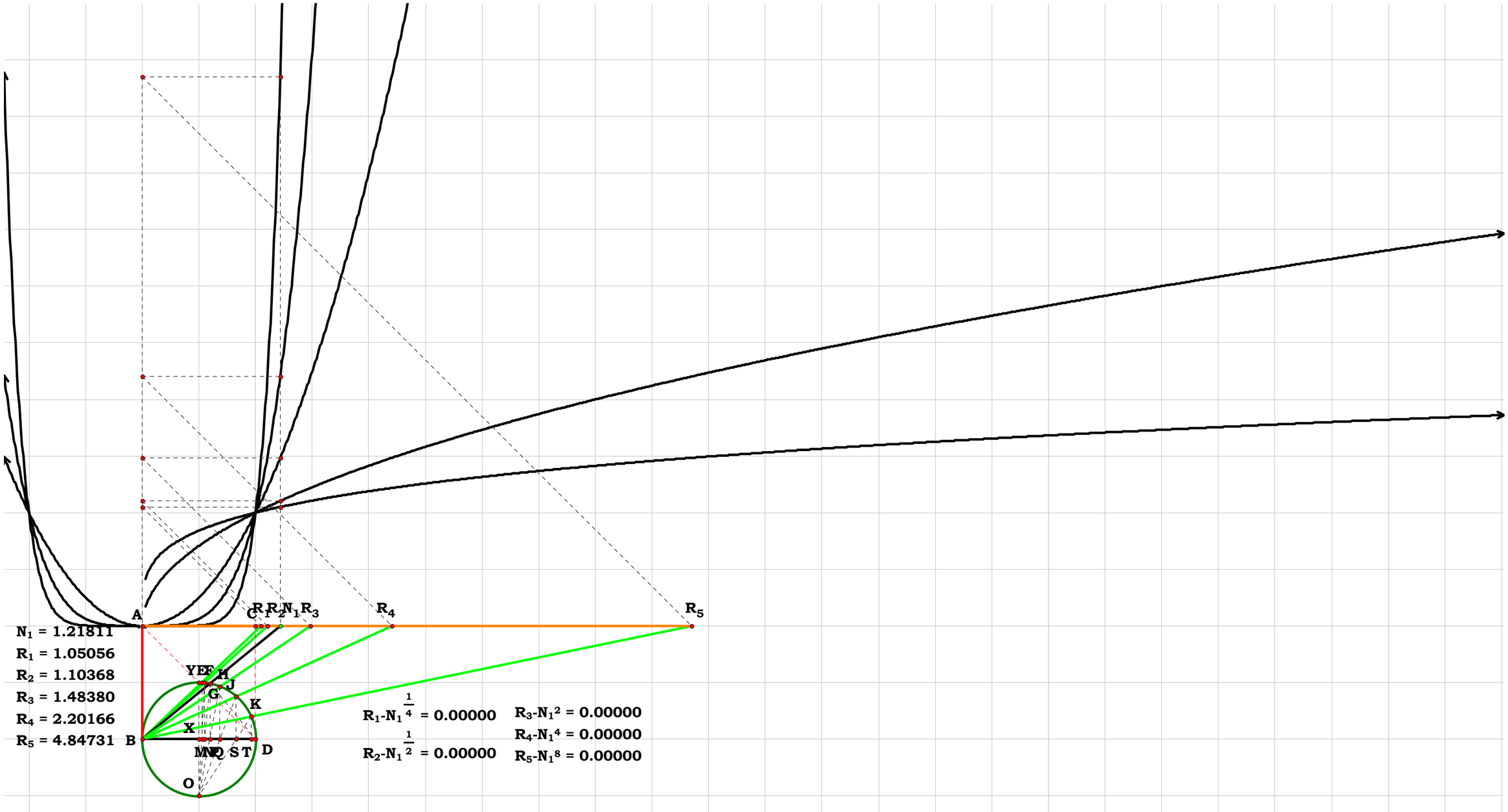
Now, Mathcad will come up with the following and simply refuse to reduce it.

$$R_3 - \frac{N_1^{4}}{\sqrt{\frac{N_1^{4}}{\left(N_1^{4}+1\right)^{2}} \cdot \left(N_1^{4}+1\right)}} = 0$$

Being a dumb program, only doing what it is told, we do not have to worry about hurting its feelings by finishing the job. One might find that in many math programs, one still has to give them a helping hand.

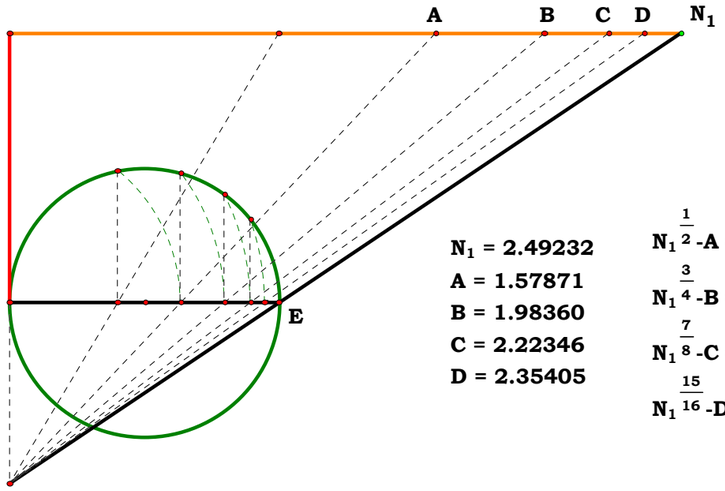
Simply repeat the process for every value one wishes to find, or until one can take a hint.

$$R_3 - N_1^{2} = 0$$


A
C
R1
R2
N1
R3
R4
R5
N1 = 1.21811
R1 = 1.05056
R2 = 1.10368
R3 = 1.48380
R4 = 2.20166
R5 = 4.84731
B
D
O
R1-N1 1/4 = 0.00000
R2-N1 1/2 = 0.00000
R3-N1 2 = 0.00000
R4-N1 4 = 0.00000
R5-N1 8 = 0.00000

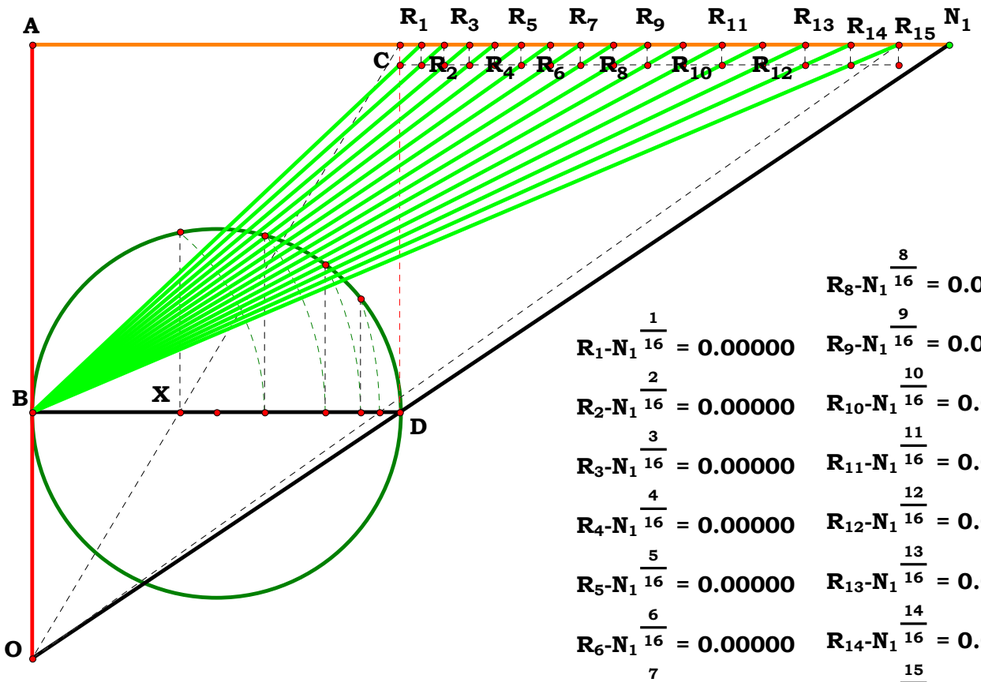
090912-9

One might add this method for finding exponential series to their bag of tricks. I am not going to demonstrate the mathematics. One might refer to The Delian Quest.



$N_1 = 2.49232$
$A = 1.57871$
$B = 1.98360$
$C = 2.22346$
$D = 2.35405$

$N_1^{\frac{1}{2}} - A = 0.00000$
$N_1^{\frac{3}{4}} - B = 0.00000$
$N_1^{\frac{7}{8}} - C = 0.00000$
$N_1^{\frac{15}{16}} - D = 0.00000$



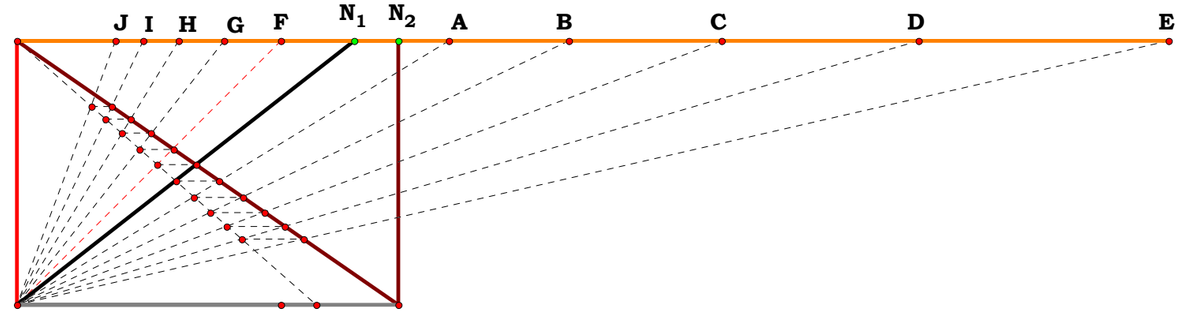
$N_1 = 2.49232$
$R_1 = 1.05874$
$R_2 = 1.12092$
$R_3 = 1.18676$
$R_4 = 1.25647$
$R_5 = 1.33027$
$R_6 = 1.40840$
$R_7 = 1.49113$
$R_8 = 1.57871$
$R_9 = 1.67144$
$R_{10} = 1.76961$
$R_{11} = 1.87355$
$R_{12} = 1.98360$
$R_{13} = 2.10010$
$R_{14} = 2.22346$
$R_{15} = 2.35405$

$R_1 - N_1^{\frac{1}{16}} = 0.00000$
$R_2 - N_1^{\frac{2}{16}} = 0.00000$
$R_3 - N_1^{\frac{3}{16}} = 0.00000$
$R_4 - N_1^{\frac{4}{16}} = 0.00000$
$R_5 - N_1^{\frac{5}{16}} = 0.00000$
$R_6 - N_1^{\frac{6}{16}} = 0.00000$
$R_7 - N_1^{\frac{7}{16}} = 0.00000$
$R_8 - N_1^{\frac{8}{16}} = 0.00000$
$R_9 - N_1^{\frac{9}{16}} = 0.00000$
$R_{10} - N_1^{\frac{10}{16}} = 0.00000$
$R_{11} - N_1^{\frac{11}{16}} = 0.00000$
$R_{12} - N_1^{\frac{12}{16}} = 0.00000$
$R_{13} - N_1^{\frac{13}{16}} = 0.00000$
$R_{14} - N_1^{\frac{14}{16}} = 0.00000$
$R_{15} - N_1^{\frac{15}{16}} = 0.00000$

091712

About the only thing interesting about this plate is that the second variable will not be found in the equation. No matter how large or how small one makes it, it will remain invisible to the logic except for one point, it has to be there. In short, its value is of no concern, its form, however, is required. Therefore, there are equations, which, a value is not seen, nor does one find its name, however, without being able to conceptually abstract it, one cannot solve for what they do have. The figure gives one something to think about in regard to conceptual ability. To solve a problem when one is dealing with a form of behavior one has to infer. I exampled a figure with this fact in the Delian Quest. The structure had to be there, but it neither added to, nor subtracted from the equation, they are binary operations.

Or, one can say, that in doing the math, the unit, or one always has to be kept in mind.



	A = 1.63353	F = 1.00000	N_1^2-A = 0.00000	N_1^0-F = 0.00000
N_1 = 1.27809	B = 2.08780	G = 0.78241	N_1^3-B = 0.00000	N_1^{-1}-G = 0.00000
N_2 = 1.44523	C = 2.66841	H = 0.61217	N_1^4-C = 0.00000	N_1^{-2}-H = 0.00000
	D = 3.41048	I = 0.47897	N_1^5-D = 0.00000	N_1^{-3}-I = 0.00000
	E = 4.35891	J = 0.37476	N_1^6-E = 0.00000	N_1^{-4}-J = 0.00000

930725

$AB := 1$

$N_1 := 4.05604$

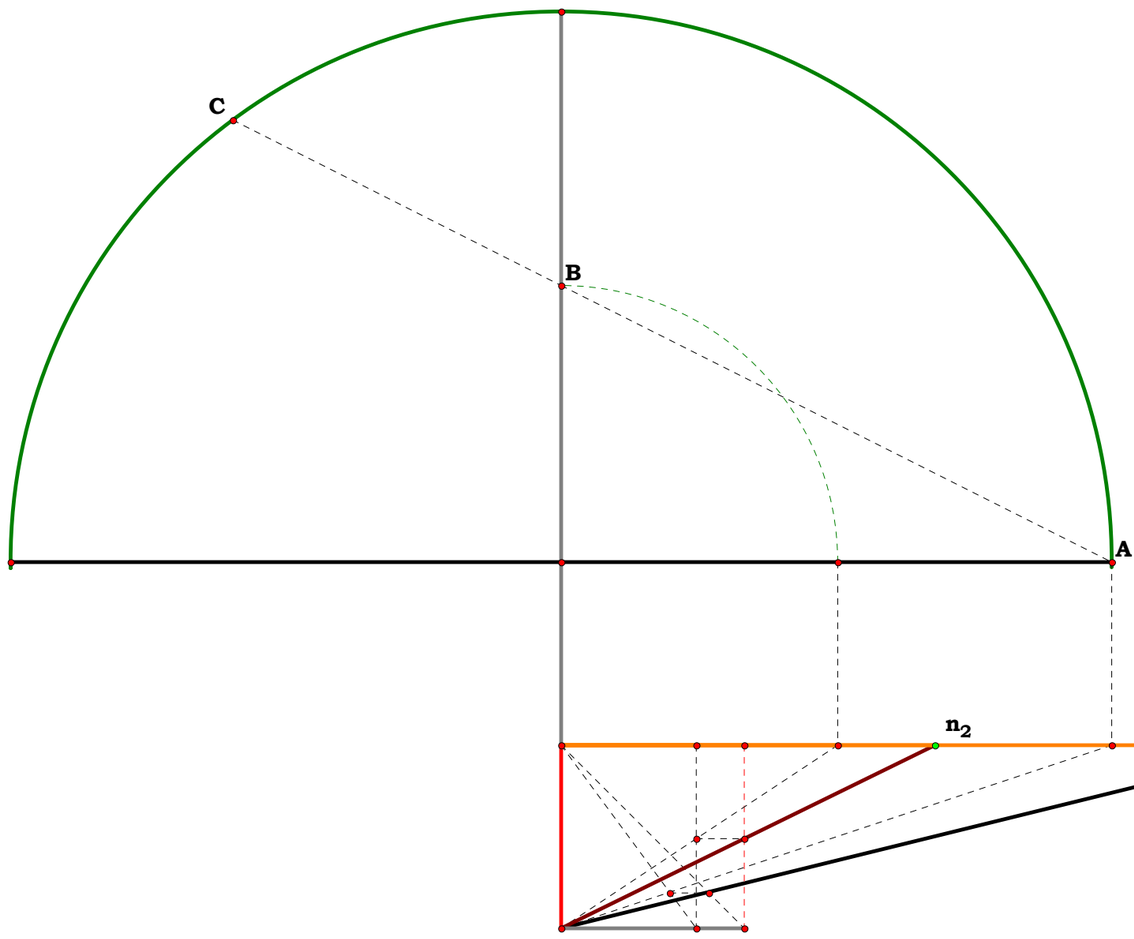
$N_2 := 2.03783$

$$\frac{\left(\frac{N_2}{N_1}\right)^2 + 1}{2} = 0.626212$$

$$\frac{N_1^2 + N_2^2}{2 \cdot N_1^2} = 0.626212$$

$$\frac{N_2^2}{2 \cdot N_1^2} + \frac{1}{2} = 0.626212$$

$$\frac{1}{2} \cdot \left(\frac{N_2}{N_1}\right)^2 + \frac{1}{2} = 0.626212$$



$$\frac{\frac{N_2^2}{N_1} + 1}{2} - \frac{AB}{AC} = 0.00000$$

$$\frac{\frac{N_2^2}{N_1} + 1}{2} = 0.62621$$

$$\frac{AB}{AC} = 0.62621$$

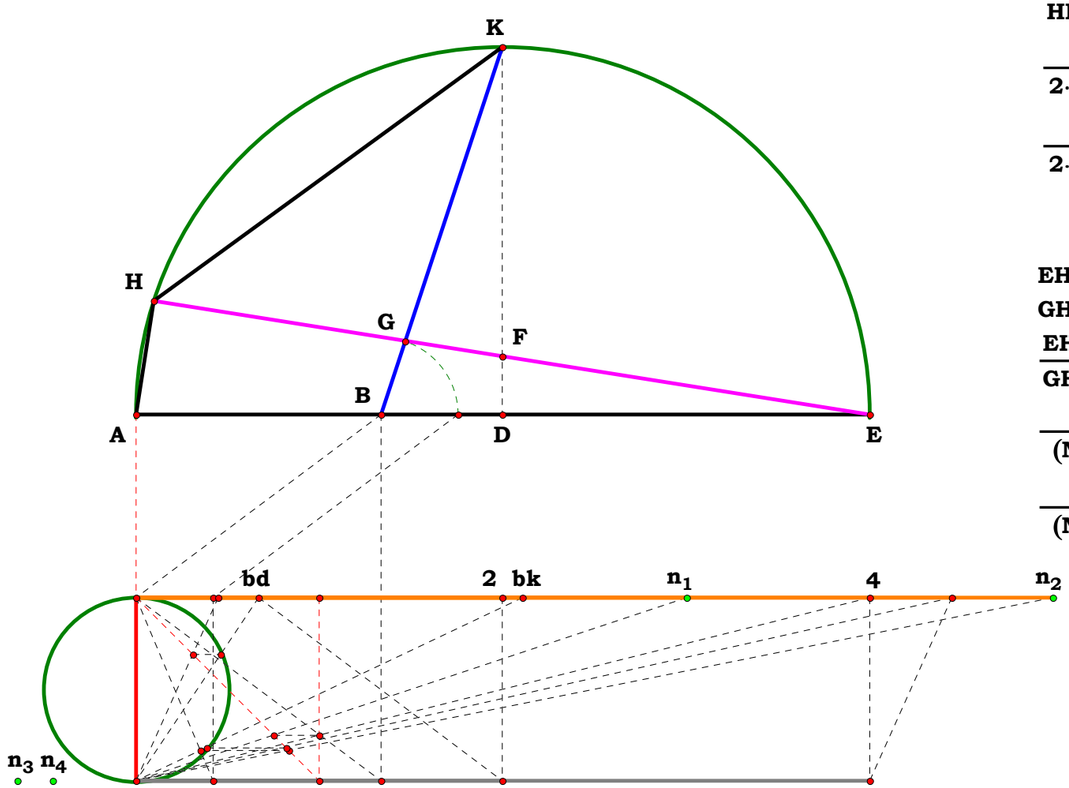
$N_1 = 4.05604$

$N_2 = 2.03783$

$AB = 3.35735$

$AC = 5.36137$

931124



$HK = 2.35269$

$\frac{AH}{HK} = 0.26517$

$\frac{\sqrt{2}\cdot N_1}{2\cdot(N_1-1)\cdot(N_2-1)} = 0.26517$

$\frac{\sqrt{2}\cdot N_1}{2\cdot(N_1-1)\cdot(N_2-1)} - \frac{AH}{HK} = 0.00000$

$EH = 3.95105$

$GH = 1.38633$

$\frac{EH}{GH} = 2.85000$

$\frac{N_1\cdot N_2\cdot((2\cdot N_1\cdot N_2-2\cdot N_2-N_1)+2)}{(N_2-1)\cdot((((2\cdot N_1\cdot N_2-2\cdot N_2)+N_1^2)-2\cdot N_1)+2)} = 2.85000$

$\frac{N_1\cdot N_2\cdot((2\cdot N_1\cdot N_2-2\cdot N_2-N_1)+2)}{(N_2-1)\cdot((((2\cdot N_1\cdot N_2-2\cdot N_2)+N_1^2)-2\cdot N_1)+2)} - \frac{EH}{GH} = 0.00000$